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ABSTRACT

The study investigated programs for elementary level gifted and talented students available in all Ohio public school districts and training programs for teachers of the gifted and talented available in 51 Ohio colleges approved for teacher education. Surveys, visitations, and interviews were used to collect the data. Among five major conclusions were that the majority of Ohio public school systems did not have operational gifted/talented programs at the time of the study (1978), that most programs did not have a program coordinator who met Ohio standards for state funding, and that there is a lack of agreement between Ohio public school systems, Ohio teacher educational institutions, and teachers of the gifted on the most desirable types of teacher training. Five major recommendations of the study include the following: improve articulation between teacher educators and public school systems regarding the gifted teacher's training needs, and increase the number of Ohio teacher education institutions which offer graduate level degree programs. Appended are the survey instruments, letters of transmittal, interview checklists, sample identification instruments and tests, descriptions of six programs for the gifted and talented, and college course descriptions for teachers of the gifted and talented. (PHR)

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ABSTRACT

TRAINING NEEDS OF TEACHERS FOR THE GIFTED AND TALENTED IN THE ELEMENTARY SCHOOLS OF OHIO

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WALDEN UNIVERSITY

April 1979

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TRAINING NEEDS OF TEACHERS FOR THE GIFTED AND TALENTED IN THE ELEMENTARY SCHOOLS OF OHIO

This investigation studied the generally accepted essential elements in the training of teachers of the gifted and talented in the elementary schools of Ohio.

The major objectives of this investigation were:

1. To compile data on programs for the gifted and talented in the elementary schools of Ohio
2. To compile data on training programs for teachers of the gifted and talented which were available to those teachers in Ohio
3. To analyze these data and to draw implications for recommendations which could lead to the improvement of training programs for these teachers

To obtain the necessary research data, procedures were followed which included: (1) surveys, (2) visitations, and (3) interviews. Conclusions and recommendations of the investigation follow.

Major Conclusions

1. The majority of Ohio public school systems did not have operational gifted/talented programs at the time of this study.
2. The majority of operational gifted/talented programs did not have a program coordinator who met Ohio standards for state funding at the time of this study.

3. There is a lack of agreement between Ohio public school systems, Ohio teacher educational institutions, and teachers of the gifted on the most desirable types of teacher training.

4. Ohio teacher education institutions are not sufficiently involved in cooperative inservice training.

5. Teachers of the gifted involved in this study considered the following courses most valuable to them in developing needed skills: curriculum development, enrichment activities, instructional techniques, clasroom materials development, child creativity development techniques, and psychology of the gifted and talented.

Major Recommendations

1. Improve articulation between teacher educators and public school systems regarding the gifted teacher's training needs.

2. Increase teacher educators involvement in cooperative inservice training programs.

3. Increase the number of Ohio teacher education institutions which offer graduate-level degree programs.

4. Require Ohio certification for teachers of the gifted and talented.

5. Replication of this study by all other states coordinated by the U.S. Office of Education.

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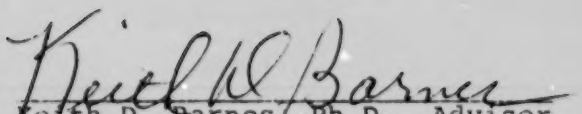

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CHAPTER I

INTRODUCTION

Background of the Problem

Public education in America has long given special emphasis and assistance to children who have been classified as exceptional; and yet, one group of children and youth within this growing population has been largely ignored. They are the gifted and talented.

In recent years, many educators of national reputation have begun to give focused attention to the special needs of the gifted and talented. Sidney Marland (1971), the former U.S. Commissioner of Education, for example, spoke knowledgeably about this long-standing neglect of a most significant segment of our national student body:

> Educators, legislators, and parents have long puzzled over the problem of educating gifted students in a public education program geared primarily to a philosophy of egalitarianism.
>
> We know that gifted children can be identified as early as the elementary grades and that these children in later life often make outstanding contributions to our society in the arts, politics, business, and the sciences. But, disturbingly, research has confirmed that many talented children perform far below their intellectual potential. We are increasingly being stripped of the comfortable notion that a bright mind will make its own way. Intellectual and creative talent cannot survive educational neglect and apathy. (page vii)

The same report presented some startling figures regarding the neglect of gifted and talented students. The report pointed out that fifty-seven percent of the elementary and secondary school principals throughout our country reported that there were no gifted children in their schools. The report additionally noted that at least three-fourths of the gifted and talented children of America receive no special attention of any kind. Incredibly, the study found that the neglect of this group is at least double that of any handicapped group in our country (Marland, 1971).

More recent figures show that only thirteen percent of an estimated 2,580,000 gifted and talented receive any kind of special services; while an estimated 484,000 children live in states which provide little or no service (Boston, 1977). According to Sisk (1978), the most recent federal appropriation of funds for the gifted and talented of $3,780,000 have been minimal at approximately one dollar per student.

Emphasizing the personnel training needs of an educational program for the gifted, Marland (1971) concluded:

> Key to effective services for education of gifted and talented students is the commitment to special preparation for the educational personnel to work with students. The widespread general interest in providing some training in gifted education can be seen across the country in college and university programs or course work in education

> of gifted students, and State deparments that allocate a proportion of their training resources for inservice training of teachers on education of the gifted. Only the Mountain States lack identifiable college programs or State training efforts. Inservice training activities are utilized in practically all of the regions. (page v-3)

This report spurred the U.S. Office of Education to initiate legislative provisions and supportive appropriations which encouraged institutions of higher education to increase or begin to take a more active role in training teachers to work with the gifted and talented.

During the 1970's, several recurring themes related to the training of teachers for the gifted and talented were observed. First, an expanding interest in college course work and training programs for teachers of the gifted and talented was observed. Recent national surveys investigating the scope and sequence of college course offerings for teachers of the gifted and talented have shown a net increase from 118 in 1970 to 151 in 1977 (Bruch, 1977; Karnes and Collins, 1977; Laird and Kowalski, 1974; and Shaffer and Trout, 1970). It has additionally been determined that a pressing need exists for training within the group of teachers for the gifted and talented by such means as summer institutes, inservice training, and workshops during the school year (Byrum, 1974; Feldheusen, 1977; Maker, 1975; Marland, 1971; and Vassar, 1975). Finally,

concepts of giftedness and the attendant training needs of teachers for these gifted and talented children have been broadened to include the following:

1. A multi-talented concept of giftedness with special emphasis on creativity (Feldheusen and Treffinger, 1977; Gowan, 1972; Rothanberg and Hausman, 1976; Torrance and Myer, 1970; and Torrance, 1970, 1972).

2. The need to identify and develop the gifted hidden creativity of the disadvantaged gifted (Bruch, 1971, 1975; and Grossman and Torrance, 1970).

3. A renewed interest in the special educational needs of the creative female (Bruch and Morse, 1972; Joesting, 1970; and Morse, 1978).

The University of Georgia has offered a long-standing doctoral program emphasizing creativity, including creativity in females; and the culturally different who are gifted (Bruch, 1977).

The National/State Leadership Institute on the Gifted and Talented has recognized the importance of inservice training for teachers in the area of creativity. Included in the goals of their workshops is the improved teacher skill in utilizing various teaching strategies including creativity training (Sato, 1977).

Recognizing the importance that the training of teachers for the gifted and talented has played in the education of these special children, The National Association for Gifted Children devoted the entire summer 1977 issue of their journal, The Gifted Child Quarterly,

to this subject. In his Editorial Note, John Gowan described the importance of training teachers and other school personnel to work with the gifted and talented:

> One of the critical practical problems in gifted and talented education is the training of teachers and others who work with the gifted. In the past year the Federal Government has taken steps through USOE consortium grants to underwrite stipends for "Federal Fellows" in an effort to spotlight the fact that we are not training enough leaders, administrators, teachers, and counselors in this area (Gowan, 1977a).

This kind of support has certainly been encouraging and may well serve as a stimulus to colleges and universities in taking a more active part in the sponsorship of institutes, demonstration workshops, and inservice training programs for teachers of the gifted and talented.

Clearly, the U.S. Office of Education has assumed a leadership role in pointing the way toward improvement in the gifted and talented during the 1970's. For example, in 1972 the Office of Gifted and Talented was established within the U.S. Office of Education. Additionally, state educational agencies have been strengthened using ESEA Title IV "seed" monies. In like manner, leadership development and training institutes have been established; and Program Officers have been assigned to each of the ten regional offices of the U.S. Office of Education to give further leadership and direction to these efforts (Boston, 1977). The U.S. Office of Education has actively enlisted

the support of State leadership through creation of a National/State Leadership Training Institute on the Gifted and Talented in 1972. One goal of the Institute has been to train teams of leaders from each state with one of their major purposes to prepare a comprehensive State Plan for the Gifted and Talented (Fichter, 1978).

In 1975, the Ohio Deparment of Education sent a five-member team to the Institute. Under the leadership of Franklin B. Walter, the Ohio team--with consultatation from experts throughout the country--prepared an Ohio Plan for the Education of the Gifted and Talented. The Plan adopted a definition of gifted and talented children which was published by the U.S. Office of Education in their Report to the Congress of the United States by the U.S. Commissioner of Education--Education of the Gifted and Talented in August 1971. The definition reads as follows:

> Gifted and talented children are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance. These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and to society.
>
> Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas singly or in combination:
>
> (1) general intellectual ability
> (2) special academic aptitude

(3) creative or productive thinking
(4) leadership ability
(5) visual or performing arts
(6) psychomotor ability (Marland, 1971).

In Ohio public school systems further identification of the gifted and talented child generally has included some assessment of the following behaviors:

1. highly advanced achievement in school, usually at least two years above grade level
2. advanced general language skills
3. multiple subject interests
4. capability to show intense, long-term interest in and concentration on one subject
5. high interest in the application of concepts
6. capable of productive, independent study
7. high level of idealism
8. curious and interested in the unusual

These assignments are usually the result of teacher or parent observation (Fichter, 1978).

The Ohio Plan further provided that professional educators at all levels (e.g., boards of education, parents, and private agencies) share responsibility for comprehensive planning (Fichter, 1978).

The Ohio Department of Education has assumed a vital role in the formation of a City and County Supervisory Network Programs for Gifted and Talented of twenty-two professionals across the state. Their goal has been the

institution of programs of awareness and teacher inservice workshops for the establishment and growth of city and county programs for the gifted. This statewide Supervisory Network has followed the recommendations of established educational leaders (Gallagher, 1969; Marland, 1971; and Taylor, 1974).

The Ohio Department of Education has additionally established minimum standards for programs for the gifted and talented in the publication Program Standards for School Foundation Units for Gifted Children, effective November 1, 1975. A copy of this document may be ordered from the Ohio Department of Education, Columbus, Ohio.

One of the major benefits of School Foundation Units for Gifted Children has been the funding of a school district coordinators of gifted and talented programs. The school district coordinator has been assigned an advisory and leadership role with the following responsibilities:

> The primary responsibility of the coordinator of gifted and talented programs shall be the development of a comprehensive program which involves assessment procedures, individual diagnosis where appropriate, staff development programs for school and related personnel, strategies for classroom management, and instructional methodology designed to assist the school in determining appropriate educational alternatives for children (Program Standards for School Foundation Units for Gifted Children, 1975).

It follows that school districts with coordinators for gifted and talented programs have an obvious advantage in a whole range of services and areas which they can offer the gifted and talented.

Legislative sanction and program funding, however modest, have been made available in Ohio and other states to encourage the training of teachers for the gifted and talented. Continued demonstration of vital and viable training programs at the local level should prompt a demand for increased legislative action in this critcally important area (Fichter, 1978).

This study has also examined Ohio colleges' practices in the preparation and inservice training of teachers for the gifted and talented. This was considered to be of major importance because the contributions of higher education which have proved so significant in the improvement of other special services indicated a potential for similar improvement of services for the gifted and talented.

In carrying out this research, it was hoped that the data collected and analyses made of it may serve as a means to measure existing and future efforts by public and private entities interested in training teachers in educating the gifted and talented child.

The Problem and Purpose of the Research

The premise that the progress of society has been dependent to a great extent on the accomplishments of its more able members has found support in the following statement by Arnold Toynbee (1968):

> To give a fair chance to potential creativity is a matter of life and death for any society. This is all-important, because the outstanding creative ability of a fairly small percentage of the population is mankind's ultimate capital asset, and the only one with which only man has been endowed.

There is inestimable loss when the unique abilities among the gifted and talented youth in America go undiscovered and/or underdeveloped.

As early as 1962, Riccio said, "The modern school recognizes each pupil as an individual and tries to deal with each according to his needs." (page 108) Classroom teachers often have done their best in identifying and developing gifted and talented children; however, the research and studies cited earlier point to the need for specific thinking and interaction skills required to work with these special children. Therefore, the purpose of this research has been to identify the essential elements in the training of teachers of the gifted and talented in the elementary school setting. Based upon the information collected in this research effort, as well as from readings

in this area, recommendations to improve the training of these teachers were developed.

The following objectives were formulated and have served as the major research focus of this investigation. The objectives are as follows:

1. To compile data on programs for the gifted and talented in the elementary schools of Ohio
2. To compile data on training programs for teachers of the gifted and talented available in Ohio
3. To analyze these data and to draw sound implications for recommending a program to improve training offered for these teachers

A number of research questions have flowed naturally from these major objectives and they have been posed below.

1. What programs for the gifted and talented child are in operation in the elementary schools of Ohio?
2. Which Ohio public school systems have a designated coordinator for their gifted and talented program?
3. What criteria are used in Ohio public schools to identify the gifted and talented?
4. What type(s) of preservice and/or inservice training do Ohio public schools and Ohio colleges approved for teacher education consider as desirable for a teacher of the gifted and talented?
5. What characteristics do Ohio public schools and Ohio colleges approved for teacher education consider as desirable for a teacher of the gifted and talented?
6. Which Ohio public school systems provide inservice training for teachers of the gifted and talented in cooperation with Ohio colleges approved for teacher education?

7. Which Ohio colleges approved for teacher education offer inservice training to teachers of the gifted and talented?

8. If Ohio colleges approved for teacher education offer coursework to teachers of the gifted and talented, is it at the undergraduate, graduate, or doctoral level?

9. What evidence exists of community interest in programs for the gifted and talented?

10. Are Ohio public school systems and Ohio colleges approved for teacher education in favor of future Ohio certification for teachers of the gifted and talented?

Several sources were used in the pursuit of information regarding these ten research questions. They are:

1. Two different surveys, one of the public school systems in Ohio and one of the Ohio colleges approved for teacher education, were conducted.

2. Six Ohio public school systems and six Ohio colleges were studied through visitations and interviews. In the public school systems, interviews were conducted with gifted/talented program coordinators, teachers, and administrators working with the gifted and talented. In the colleges, interviews were conducted with faculty and administrators working with the teachers of the gifted and talented.

3. Informal meetings were held with the Educational Consultant, Programs for the Gifted, at the Ohio Department of Education and with the Assistant Director of the Division of Teacher Education and Certification at the Ohio Department of Education.

4. Interviews were held with a "Federal Fellow" in the Office of Gifted and Talented, U.S. Office of Education. Additionally, follow-up correspondence with Dr. Dorothy Sisk, Director of the Office of Gifted and Talented, resulted in information which supplemented the interviews.

A complete description of these procedures has been detailed in Chapter Three.

Importance of the Research

One may assume that the need and value of this research is commensurate with many of the needs and values of our society (i.e., that of offering appropriate educational opportunities in keeping with the ability of each child to benefit, thereby increasing their opportunity for a maximum contribution to themselves and society).

Gifted and talented children have, of course, always been a part of our school population, but an alarming number of these children have never been identified or helped to develop their potentials. This study has hopefully examined the important components of programs for the gifted and talented in the public schools of Ohio and the training needs of teachers who work in these programs.

With the advent of Ohio Program Standards for School Foundation Units for Gifted Children and limited state funding, as noted earlier, many school districts in Ohio inititated programs at the local level. Many other school districts throughout the state are presently studying their own local needs and plans for gifted/talented programs. The exigency to study these various programs in a systematic fashion has been an important consideration in the decision to make this research investigation.

Faculty members from a few Ohio colleges have taken a leading role in the training of teachers and other school personnel for work with the gifted and talented. This

effort has included course offerings, college sponsorship of workshops and institutes, and inservice training offerings. This study has brough this information together for convenient consideration by university personnel and other state and national educational leaders who have an interest in long-range teacher training needs, curriculum design, and gifted course planning.

Another important training need of teachers of the gifted and talented has been the cooperative articulation of school districts and teacher educators concerning the unique training needs of teachers of the gifted and talented. Through a study such as this, it is hoped that sound recommendations have been identified which may facilitate the coordination of teacher training with present and proposed programs for the gifted and talented children in the elementary schools of Ohio.

Finally, a distinctly critical element of this investigation is that this is the first such investigation of this kind to be conducted in Ohio. A study, therefore, which involves all of the public school districts and all of the colleges approved for teacher education in Ohio, seems important and timely during a period when interest in the training of teachers for the gifted and talented is at an all-time high in national, state, and local interest.

Definition of Terms

For the purpose of this investigation the following definitions of terms apply:

Acceleration: The following definition was adopted by the Ohio Department of Education in 1975:

> A general approach which may lead to programs such as early entrance, telescoping at the elementary level, and individual advanced subject matter programs

City School District: The following definition is from the Ohio Revised Code, Section 3311.02:

> The territory within the corporate limits of each city, excluding the territory detached therefrom for school purposes and including the territory attached thereto for school purposes, constitutes a city school district

County School System: The following definition is from the Ohio Revised Code, Section 3311.05:

> The territory within the territorial limits of a county, exclusive of the territory embraced in any city school district, exempted village school district, and excluding the territory detached therefrom for school purposes and including the territory attached thereto for school purposes constitutes a county school system

District: District has been used on an interchangeable basis with System in this investigation.

Enrichment: The following definition was adopted by the Ohio Deparment of Education in 1975:

> A general approach which offers an expanded curriculum for the gifted which extends rather than replaces the general educational program

Exempted Village District: The following definition is from the Ohio Revised Code, Section 3311.04:

> Each school district known as an exempted village school district on September 16, 1943 shall be known as an "exempted village district" and shall continue to be so known until it has lost its identity as a separate unit or has acquired a different styling as provided by law

Gifted and Talented Children: The following definition was adopted by the Ohio Department of Education in 1975:

> Those children identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance. These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society.
>
> Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following singly or in combination: (1) general intellectual ability, (2) special academic aptitude, (3) creative or productive thinking, (4) leadership ability, (5) visual or performing arts, (6) psychomotor ability.

Grouping: The following definition was adopted by the Ohio Department of Education in 1975:

> An administrative arrangement which may facilitate the implementation of various program models through the use of resource centers, special homogeneous classes, or separate schools

Inservice Program: The following definition is from the Dictionary of Education:

> A school or community teacher-training plan that may include such activities as seminars, workshops, bulletins, television or films for individuals who are already teaching; the program is designed to increase their competency or to bring them abreast of new developments (Good, 1977)

Preservice Training: "The total formal preparation for teaching that a person has completed in a teacher education institution" (Good, 1977)

Program: "(1) A plan of procedure--: (2) all the courses in one field of study--organized to fulfill the same general objectives and conducted along similar lines" (Good, 1977)

Training: The following definition is from the 1978 Yearbook of Education:

> The term training is meant to include both preservice and inservice education, on the assumption that most principles or standards of training apply to both

Training and preparation have been used interchangeably.

Limitations of the Study

The following limitations of this study have been recognized and taken into consideration. Limitations are:

1. The study assumed that it has been and continues to be the obligation of the public schools in Ohio to offer appropriate educational opportunities in keeping with each child's ability to learn.

2. The study assumes that there are gifted and talented children in every school system and that it is possible to identify them.

3. The study has not included school systems or colleges outsied of Ohio. The purpose of the study, however, was to determine the training needs of teachers fo the gifted and talented children in the elementary schools of Ohio.

The research was continually aware of the limitations inherent in a descriptive study using a mail survey; however, the survey method permitted the researcher to collect data from a larger population more rapidly and more economically than other research methods. Additionally, visitations and interviews with representative samples of the study population were utilized as supplemental research methods.

Organization of the Study

This introductory chapter has included statements about the background of the problem, the problem and purpose of the research, the importance of the research, definitions of terms, and limitations of the study.

The second chapter has identified significant literature pertaining to the subject of this investigation. This literature review should help the uninitiated reader to better understand the field of gifted education and the current information regarding the training of teachers of the gifted and talented children in our elementary schools. This, in turn, may assist the reader in evaluating the training of teachers for the gifted and talented children in the elementary schools in his or her area of the nation.

The third chapter has described the procedures used in this study, the population and scope of the study.

Chapter Four examined and analyzed the data from the surveys, visitations, and interviews which served as primary data sources.

Chapter Five summarized the data and offered conclusions and recommendations based on an analysis of the findings as they relate to the objectives of the study. The concluding section of Chapter Five detailed practical suggestions for improvement of the training available to teachers of the gifted and talented in the elementary schools of Ohio. These suggestions and recommendations were based on a careful evaluation of this research data as well as information reported in Chapter Two.

The final section of this research report, the appendix, contains copies of the study instruments, letters of transmittal, bibliographical references, and other pertinent data.

CHAPTER II

RELATED LITERATURE

Four bodies of literature were judged to be pertinent to this study. The first section has presented an historical overview of the gifted child movement. The purposes of this section were: (1) to provide a framework for relating this study to prior events and (2) to build a rationale for the desirability of studying the training needs of teachers for the gifted and talented.

The second section of this literature review has acquainted the reader with existing studies regarding findings about the characteristics of teachers for the gifted and talented. The primary purpose of this section was to identify desirable characteristics of teachers of the gifted and talented.

The third section of the review examined pertinent literature related to the college preparation and inservice training of teachers of the gifted and talented. The purpose of this section was to examine expert opinion about the desirable options for training in these two areas. This examination provided a basis for comparison between these desirable options and the ones, operational in Ohio at the time of the study, which are reported in Chapter Four on pages 72-74.

The fourth section of the literature review identified current practices and methodologies in the identification of gifted and talented children. The primary purpose of this section was to provide a basis for comparing desirable options and those in operation during the time of the study in the identification process which are reported in Chapter Four and in the Appendices on pages 136 to 140.

An Historical Overview of the Gifted Child Movement

In order to approach the subject of this study in the proper perspective, it may be helpful to the reader to better understand the historical development of the gifted child movement. Since the subject is broad and the literature is vast, it has been necessary to limit the overview to the last fifty years.

For the third time in this century, educators in the United States have begun to turn their attention to the gifted and talented child. Nationally, educators first began to look more intently at the gifted during the 1920's, then again during the "Sputnik Crisis" of the 1950's and the early 1960's. Currently, attention in the decade of the 1970's may be assumed to be a resumption of the nation's self-examination of its role in educating the gifted and talented after a decade of interest in compensatory education (Stephens, 1977).

Lewis Terman and his colleagues at Stanford University deserve credit for directing the attention of educational interest to the gifted beginning in the early 1920's. Terman's Genetic Studies of Genius (Terman, 1925; Terman and Cox, 1926; Terman, 1930; Terman and Oden, 1947; and Terman and Oden, 1959) served as a stimulus for this attention and are generally regarded as the "monumental works" during those years. Lifelong work with the gifted convinced Terman that the gifted should work at their own pace, be accelerated beyond their age group, work independently much of the time, develop creativity and persistence, work with other gifted children, and have ample guidance in reaching life decisions (Seago, 1972).

During the 1930's, while Terman's work was developing on the Pacific Coast, Leta Hollingsworth conducted educational research with gifted children in elementary schools in New York State. The summary of the enrichment curriculum plan in these schools has much in common with the enrichment programs of the 1940's, with centers of interest, units of work, field trips, culminating experiences, science activities, and enjoyment of literature, dramatics, and creative expression (Pritchard, 1951).

Many special programs started during the 1920's. One of these in the Cleveland, Ohio, City Schools, The Major Works Program, for example, has been in continuous operation for fifty-eight years. The Cleveland gifted

program, which started in 1921 with twenty-five children in a single classroom, has now grown to a staff of 110 teachers, administrators, and specialists serving over 1800 children. The program directors consider each child to be unique and have as one of their major goals the encouragement of students to work at their peak abilities (Gifford, 1973).

The literature pertaining to gifted programs that were operational during the 1920's, 1930's, and 1940's was found to be extensive. Those who may wish to read beyond the scope of this review might find it helpful to consult the annotated bibliography in The Gifted Child (Witty, 1951).

During the 1950's, following the Russians' successful launching of Sputnik, concern with the need to overtake the Soviet Union prompted new programs for the gifted and new methodologies and materials for their teachers. One teacher preparation program of that time, The Hunter College Elementary School in New York, was the subject of numerous stuides. Research by Hildreth (1952) and Brumbah (1959) described the school as distinctive because the entire school was devoted to the education of gifted children and the preparation of their future teachers.

During the 1950's Wilson directed extensive studies on the preparation and training of teachers for gifted

The Chi-Square test of significance was used to determine which of the differences between the groups were most significant. Tschudin (1978) reported seventeen statistically significant differences between teachers in the outstanding group and those in the control group. Outstanding teachers:

- set goals that develop student confidence . . .
- gather ideas from a wider variety of sources . . .
- create better plans and are more willing to deviate from them . . .
- are better classroom designers . . .
- use common materials in uncommon ways . . .
- work harder at individualizing . . .
- use a wider variety of teaching methods . . .
- provide an appealing array of activities . . .
- get students actively involved . . .
- use all the help they can get . . .
- assign less homework . . .
- use teacher-made tests sparingly . . .
- record student progress without that little red notebook . . .
- are busier after school hours, too! . . .
- have more fun . . .
- succeed through hard work, not heredity . . .
- discipline students with less punishment . . .

The study also revealed numerous practical teaching activities that outstanding teachers had used to achieve these differences (Tschudin, 1978).

Student Opinions

In the earliest reports on his Stanford studies, Terman (1925) clearly demonstrated that gifted children

enjoyed school and intellectual play. He explained that these children least liked subjects with low intellectual demands and found subjects that made stronger demands on intelligence to be easier and more enjoyable.

Similarly, students in the Cleveland Major Works Program mentioned sense of humor, encouragement, knowledge of subject, firmness with fairness, knowledge of children, high sense of marality, reassuring, recognition of the individual, and enjoyment of teaching as desirable characteristics for teachers (Davis, 1954; and Gifford, 1973).

Research by Bishop (1968) indicated that teachers nominated by students in the Governor's Honor Program in Georgia who had Wechsler Adult Intelligence Scale (WAIS) intelligence scores of 128 or higher, possessed literary and cultural interests, a desire for personal intellectual growth, and exhibited student-centered behavior.

In summary, this review has not found adequate evidence of any single profile for the desirable characteristics of a teacher of the gifted and talented; however, some recurring characteristics seem to be important because they were frequently cited in the literature. Desirable characteristics that emerged from this review as important ones include the following:

1. Creative characteristics such as originality, flexibility, spontaneity, and intuitiveness

2. Intellectuality with a grouping of ability, culture, curiosity, and a developed personal style forming the composite

3. Scholarly enthusiasm and interest in continuing self-development

4. Understanding and acceptance of human variability

5. Masterful teaching which facilitates different modes of learning, promotes independent study, and reaches some equilibrium between the cognitive and affective domains

6. Personal maturity or strength based on a positive self-image; not afraid to challenge or be challenged by students

7. High energy level, including the energy to exploit personal talent and take part in community activities

8. Has a strong desire to teach gifted and talented children

9. Has ability to talk and listen to others in the school-community group including parents, mentors, community resource people, and counselors

College Preparation and Inservice Training of Teachers for the Gifted and Talented Child

This section of the literature review has examined studies related to the college preparation and inservice training of teachers for the gifted and talented child. The heart of the section has embodied current trends and representative samples of current programs in these two areas of concern. Each program, in its own way, described what is currently operational throughout the country; and

has served as a basis for comparison of similar programs, operating in Ohio at the time of this research, reported in Chapter Four on pages 80-86.

College Preparation

A review of the literature for the past decade led to the identification of significant trends in the field of college preparation of teachers for the gifted and talented. These trends emphasized the growing realization by educators, legislators, and parents of the wisdom of Marland, cited earlier in Chapter One on page 2, when he concluded in part that the "Key to effective services for education of gifted and talented students is the commitment to special preparation for the educational personnel to work with such students" (Marland, 1972).

The first trend noted was that states with well-established programs and adequate financial support from their state governments have more institutions with gifted and talented course and/or degree offerings. These figures are displayed in Table 1 on the next page.

TABLE 1

A COMPARISON OF THE TOP TEN STATES IN FUNDS EXPENDED FOR GIFTED AND TALENTED PROGRAMS AND THE NUMBER OF INSTITUTIONS WITH GIFTED AND TALENTED COURSE AND/OR DEGREE OFFERINGS

State	Funds Expended (Millions)[1]	Number of Institutions[2]
California	$15.4	7
Pennsylvania	13.0	5
Florida	12.0	2
North Carolina	8.0	17
Georgia	4.3	7
Connecticut	3.0	6
Illinois	2.7	3
Missouri	1.5	2
Virginia	1.4	2
Idaho	1.1	1

[1]Sisk, Dorothy. "Top Ten States in Funds Expended for Gifted and Talented Programs," The Gifted Child Quarterly, Vol. 21 (Summer 1977); p. 204.

[2]Bruch, Catherine B. "Current Degree Programs in Gifted Education," The Gifted Child Quarterly, Vol. 21 (Summer 1977); pp. 137-141.

The figures displayed in Table 1 show a definite correlation between funds expended and the number of institutions offering coursework for teachers of the gifted and talented, with state certification requirements for these teachers appearing to follow the same pattern. A national survey conducted by Karnes and Collins (1977) reported that eight states had specific certification requirements for teachers of the gifted and talented. The eight states were Alabama, Florida, Georgia, Kansas, North Carolina, North Dakota, Virginia, and West Virginia. Three of these states--Florida, Georgia, and North Carolina--were listed in the top five states in funds expended for gifted/talented programs shown in Table 1.

Another trend noted was an increase in the number of courses offered and the number of institutions offering college preparation for teachers of the gifted and talented. The number of courses had increased from 118 in 1970 to 151 in 1977 (Bruch, 1977; Karnes and Collins, 1977; Laird and Kowalski, 1972; and Shaffer and Troug, 1970). Concurrently, the number of institutions offering courses had increased from thirty in 1970 to eighty-seven in 1977 (Marland, 1971; and Bruch, 1977).

A third trend identified in this review indicated that the majority of gifted and talented courses admit undergraduates, but the degree programs are, in most cases,

at the masters degree level. In 1977, twenty-three of the eighty-seven institutions reporting gifted and talented coursework offered doctoral programs (Bruch, 1977).

Finally, Maker (1975) reported that even though the titles of courses and the sequences in which they were taken varied, the overall content was similar among institutions offering degree programs. She reported that the usual sequence in degree programs was:

1. Nature and needs of gifted--characteristics and psychological considerations
2. Material and methods in the education of the gifted--instructional strategy
3. Education of the gifted--study of programs and administrative arrangements
4. Seminars in education of the gifted--explore topics of teacher interest
5. Practicum--practice teaching or other in-depth experience (page 22)

Since 1966, the University of South Florida (Tampa) has offered a graduate program which focuses upon a human values approach. Sisk (1975) reproted that the orientation was "Rogerian" in nature, with prospective teachers becoming facilitators of change and learning through small-group dynamics, apprentice-type field work, modeling which reflects what one values for another, and community impact work with parents in enrichment seminars.

Two programs, Plan I and Plan II at the masters level, were described. Plan I was designed for the experienced teacher; Plan II for an education major who plans to teach the gifted and talented (Sisk, 1975).

Under the direction of Donald Treffinger, the University of Kansas has developed a graduate-level program through the doctorate, with emphasis upon open, individualized instruction for the gifted and telented; and an ultimate goal of preparing the teacher to provide a creative learning environment (Bruch, 1977).

Treffinger (1975) reported that an important part of the program at the University of Kansas consisted of preparing the teacher to facilitate self-directed learning by the gifted student. Teachers learned to use a four-step basic model of instruction to facilitate the movement of gifted and talented students toward self-directed learning. The four steps were (1) the identification of goals and objectives, with teacher and student involved in deciding what was to be learned; (2) assessment of the entering behavior of the student to determine personal characteristics, needs or motives which may influence instruction; (3) identification and implementation of the most appropriate instructional procedures, with teacher-defined options to help the student attain his/her objectives; and (4) teacher evaluation and student self-evaluation to determine if the goals had been reached.

Bruch (1977) revealed that the University of Connecticut offered "a well-established program emphasizing leadership in

culturally different populations, and development and testing of gifted/talented curriculum and teaching materials." Maker found three major components: three core courses in the psychology and education of the gifted and talented; related courses in measurement, counseling, curriculum, and other specialties; and internship and practicum experiences which link theory to practice (Maker, 1975).

For nearly a decade the University of Georgia has offered a program emphasizing creativity, including creativity in the female; and working with the culturally different gifted and talented (Bruch, 1977). As early as 1969, the University of Georgia's offerings to those who wished to specialize in the education of the gifted and talented included: characteristics, learning abilities, practicum and internship experiences, seminars, identification, and guidance of the gifted and talented (Gowan and Torrance, 1970).

Inservice Training

A review of the past decade's literature revealed a growing interest in national, state, and local use of inservice training as an important way to improve the thinking and interaction skills of teachers in working with the gifted and talented. The majority of this inservice training is offered by colleges which prepare teachers for work with the gifted and talented prior to their first

classroom experience. Course offerings cited in the section on the preparation of teachers for the gifted and talented, pages 34-39, are often available through inservice teacher experiences in many institutions (Maker, 1975).

Additionally, several colleges offer continuing, cooperative programs between their faculty and staff of nearby public schools. As an example, Feldheusen (1977) reported on a cooperative program between Purdue University faculty and students working in cooperation with the staff, students, and parents in three public schools. The program provides graduate students with practical experience and the gifted children with educational experiences both in the cognitive and affective learning domains.

Class sessions were devoted to active learning, scheduled once a week for two hours during the school year or for two afternoons each week in the summer term, and linked assigned reading theories to practical classroom teaching experiences. Cooperating school staff, university faculty and gifted students' parents met twice each term. The practical experience aspect of the Purdue program supported earlier findings by Gold (1963) and Torrance and Myer (1970) which had noted that a practicum should not be just an imitation, but should instead provide an opportunity for classroom involvement which was both meaningful and original.

Another exemplary model of a cooperative university-public school program has been directed by John Gowan for over a decade. The San Fernando Valley State College in California, in cooperation with surrounding school districts, conducted summer workshops for counselors, teachers, and gifted students. The primary purpose of the program was to increase and unlock the creativity of all program participants. The procedure described was a synergistic one with integrated cognitive models (e.g., the Guilford Structure of the Intellect Model, 1967; The Taxonomy of Educational Objectives in the Cognitive Domain, Bloom, 1956; The Affective Domain, Krathwohl, 1964; and Erikson's Eight Stages, 1960), guidance, mental health, and personal support for participants' egos (Gowan, 1977).

The National/State Leadership Institute on the Gifted and Talented also has developed a series of workshops which provide special training for teachers of the gifted and talented. One example of this training involved sixty-two students and thirty-two teachers from the Las Vegas, Nevada Public Schools in a month-long summer workshop co-sponsored by the schools and the University of Nevada. Class dynamics and involvement with the students was combined with lectures and work sessions led by nationally recognized experts in the field (Curry and Sato, 1977).

The private sector has also developed inservice training programs for teachers of the gifted and talented. One such program, "Working with the Gifted and Talented (K-8)," was developed by The Learning Institute, Palo Alto, California, and is advertised nationally in education journals. The program focuses on ways to enrich the school experiences of the gifted and talented in the elementary school (Liebowitz, 1978).

Another type of involvement by the private sector was evidenced by the Metropolitan Education Center for the Gifted and Talented, developed and financed in part by the Junior League of Toledo, Ohio, Incorporated. Since 1977, the center has conducted monthly inservice training sessions for teachers, parents, and community members in cooperation with Toledo University and the Toledo Public Schools (Lowe, 1977).

In reviewing the programs of colleges involved in this chapter and those programs which will be discussed and analyzed in Chapter Four, it has been important to be aware of the Standards for Accreditation of Teacher Education (1971. The following "Standards for Programs for the Initial Preparation of Teachers" have been significant to this study:

1.1. Design of Curricula

Standard: Teacher education curricula are based on objectives reflecting the institution's conception of the teacher's role, and are organized to include general studies, content for the teaching specialty, humanistic and behavioral studies, teaching and learning theory with laboratory and clinical experience, and practicum. (page 3)

2.1. Competency and Utilization of Faculty

Standard: An institution engaged in preparing teachers has full-time members in teacher education, each with post-master's preparation and/or demonstrated scholarly competence, and each with appropriate specializations. Such specializations make possible competent instruction in humanistic and behavioral studies, in teaching and learning theories, and in the methods of teaching in each of the specialties for which the institution prepares teachers. There are appropriate specializations to ensure competent supervision of laboratory, clinical, and practicum experiences. (page 7)

Under the several standards listed for Post-Baccalaureate Programs (graduate-level programs), it has been helpful to be aware of the following:

G1.2. Content of Curricula

Standard: The curriculum of each advanced program includes (a) content for the specialty, (b) humanistic and behavioral studies, (c) theory relevant to the specialty with direct and simulated experience in professional practice, all appropriate to the professional roles for which candidates are being prepared and all differentiated by degree or certificate level. (page 14)

One sentence in the explanation of this standard has particular significance when such experience components are considered in the light of increasing knowledge of gifted and talented children:

> The "theory with practice" component for teachers includes advanced studies that draw on the body of knowledge about teaching and learning (National Council for Accreditation of Teacher Education, 1971, page 9).

Identification of the Gifted and Talented

A review of the literature to determine current identification procedures for the gifted and talented was conducted. The studies cited mainly reflect findings of the last decade, but several other studies of relevance, which were conducted earlier, have been included.

In the late 1960's, our nation experienced a societal change marked by an increasing concern about the nature of creativity, artistic excellence, and the special educational needs of the disadvantaged. This concenr was evidenced by the definition of gifted and talented adopted by the U.S. Office of Education (Gallagher, 1975).

The definition, which was previously cited on page 5, includes six criteria which may be used singly or in combination for identification purposes. The six criteria are (1) general intellectual ability, (2) specific academic aptitude, (3) creative or productive thinking, (4) leadership ability, (5) visual and performing arts, and (6) psychomotor ability.

The area of "general intellectual ability" is still rooted to the concept of general intelligence as measured by the Stanford-Binet Intelligence Scale adapted from Binet's original scale by Terman (1925) and his colleagues at Stanford University. This concept implies that the intelligence quotient computed from this scale should serve as an identification index for the highly intellectual child (Khatena, 1978). A list of intelligence tests, including the Stanford-Binet Intelligence Scale, is found in the appendices on page 137.

Measurements of "specific academic aptitude," drawing theoretical justification from the content dimension the Structure of the Intellect Model (Guilford, 1967), attempts to identify the gifted and talented child for abilities to perform at a high level in school subjects. Aptitude and achievement tests are listed in Appendix D on page 137. The dimensional components of Guilford's Structure of the Intellect Model have been listed in the Appendix on page 136.

The roots for "creative or productive thinking" can be traced to the product dimension of Guilford's Structure of the Intellect Model and to Torrance's (1974) Theoretical Rationale of Creative Thinking for which measures are available (Khatena, 1978). Part III, Creative Characteristics, of the Scale for Rating Behavioral Characteristics of Superior Students was developed to help teachers estimate

children. A state of the art for teachers of the gifted in colleges was summarized by Wilson (1958) in part as follows:

1. Institutions are expanding their preparation of teachers in this respect chiefly by offering graduate courses, workshops, conferences, and the like, especially in summer terms . . .

2. Preparation of teachers for this special need at the undergraduate level seems to be in the framework of dealing with individual differences or with exceptional children of many categories . . .

3. Some institutions are developing specialists in the education of the gifted who contribute as lecturers, conference leaders, advisors, and writers . . .

During this same period a significant trend had been initiated toward increased preservice and inservice emphasis and increased emphasis on the selection of teachers with special abilities who would work with gifted and talented children.

As early as 1960, E. Paul Torrance pointed out that research findings on the nature and development of creative thinking had been sufficiently defined to allow for explicit goals and training programs for teacher education. He suggested that areas which warranted further study included ability testing, curriculum design, evaluation of student achievement, and counseling (Torrance, 1962).

During the 1960's, much of the interest in creative thinking was inspired by Guilford's Structure of the Intellect Model (SIM). In this Model, Guilford (1967)

offered what amounts to a periodic table of differentiated intellectual functioning. The Model inspired innovations in the education of gifted children to provide for the highly creative as well as the highly intelligent (Torrance, 1970). A list of the salient points in Guilford's Model is included in Appendix D on page 136.

In a 1962 study, Getzels and Jackson found that highly creative students made up only thirty percent of the top fifth in giftedness, but the creative group achieved as well as the gifted group.

Torrance and his associates conducted fifteen follow-up studies like the Getzels-Jackson one, hoping to determine under what conditions Getzels and Jackson's results could be replicated. These studies suggested that the Getzels-Jackson findings may occur only in schools where the teaching-learning situation facilitates student use of creative thinking abilities or where the mean intelligence level of the entire school was above normal levels (Torrance, 1965).

In a Research Monograph from Ohio's Program for the Gifted Child, Stephens has noted, "The major contribution of Getzels and Jackson's work is the raising of questions concerning creativity" (Stephens, 1964). Possibly a more valid model of giftedness and education programming associated with it had begun to emerge with consideration of giftedness as a multi-talent concept, including creativity.

The assumption that people can be gifted in a number of areas continued to grow during the 1960's and found official sanction in the definition of "Gifted and Talented" adopted by the U.S. Office of Education in 1971. This definition was cited earlier in Chapter One on page 14 and reads as follows:

> Those children identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance. These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society.
>
> Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas singly or in combination: (1) general intellectual ability, (2) special academic aptitude, (3) creative or productive thinking, (4) leadership ability, (5)visual or performing arts, (6) psychomotor ability (Marland, 1971, page iii-9).

During the 1970's concern has centered on four major areas of interest regarding the gifted and talented student. First, researchers have stressed the need to define, measure, and develop creativity.

The complexity of the concept of creativity has received growing attention from many scholars in recent years (e.g., Gowan, 1972; Khatena, 1976; Roweton, 1973; Torrance, 1974). Creativity has, in fact, been the source of special concern in terms of its measurement correlates. Two definitions of creativity have played a major part in the development of instruments for measurement: Guilford's

divergent thinking and redefinition abilities (Guilford, 1967) and Torrance's definition of creativity as a multi-stage process that involves discovering missing elements, forming hypotheses, communicating the results and possibly modifying these hypotheses (Torrance, 1962). The Torrance Test of Creative Thinking has been widely used as one of the criterion measures and has also been useful in the development of ways to teach children to think creatively (Khatena, 1976).

A second major concern of the 1970's has centered on the importance of and the viability of methods used in identifying the gifted and talented. A review of the current literature on the identification of the gifted and talented is found on pages 43-48 of this chapter.

Additionally, there has been--and continues to be--a renewed interest in the special educational needs of the gifted female.

With the changing youth culture of the 1970's, the issue of sex role identity was reopened (Bruch, 1975a). The literature on women's equal rights has not been cited here, but may be profitably examined by those who seek answers to the numerous significant issues raised in this area.

According to Grambs (1978), "It is hard to change what someone learned at home about the roles of female and male." This helps to explain Whiteside's (1974) findings

that the early assignment of certain traits as masculine (e.g., agressive independence) or as feminine (e.g., aesthetic sensitivity) has caused many girls to be reluctant in developing their talents and creativity. Research studies by Joesting and Joesting (1970) indicated that counselors, teachers, and parents have helped gifted females to prepare for a responsible career without jeopardizing future marriage plans.

The Bruch-Morse Model for Study of Creative Women and Girls (Bruch and Morse, 1972) deals with some of the personality variables associated with creativity in terms of feminine as well as masculine traits. In general, it has been inferred from the literature (Bartick, 1971; Groth, 1975; Helson, 1967; Joesting and Joesting, 1970; and Simpson, 1977) that creativity in the female often tends to be repressed by sex-role stereotypes since they limit freedom to perceive career opportunities. Additionally, Bruch (1975) reported that access to the creative feminine traits (e.g., sensitivity) and to the masculine traits (e.g., independence) would be necessary for creative functioning of either sex. The subject, however, is complex and appears to deserve further study, by other investigators, of related experiences for younger girls as well (Morse, 1978).

Finally, one of the most pressing problems impinging upon gifted and talented programs has been that of improving education for the minority and disadvantaged gifted. This perplexing social and educational problem was reported by Fox (1978) as one of the three top priority items of national concern identified in a report for the U.S. Office of Education.

A National Task Force, organized by Dorothy Sisk, Director of the Department of Gifted and Talented in the U.S. Office of Education, met on May 15-17, 1978. The conference focused their attention on three major areas of concern: (1) the need to build on the strengths of the minority/disadvantaged gifted, as opposed to remedial approaches, (2) recognition of the differentiated curriculum needs of minority/disadvantaged gifted, and (3) a definition of giftedness that focused on advanced achievement and exceptional abilities (Fox, 1978a).

This conference, and the recommendations that emerged from it, was the fruition of twenty years of work by many of the nation's leading scholars in the field (e.g., Bruch, 1971; Gallagher, 1974; Gowan, 1968; Passow, 1972; Sato, 1974; and Torrance, 1971), whose collective writings form the major contributions to current literature on the subject of minority/disadvantaged gifted and talented.

Recently, Khatena (1978) pleaded for the cause of greater opportunity for certain sub-populations when he said:

> Let us hope that America will continue to make it possible for the minority and disadvantaged gifted person to continue to have an equal opportunity to develop his talents to the fullest. (page 3)

The literature cited indicates that Khatena's hope may be realized if national, state, and local interest in the gifted and talented remains at its current level of concern.

Characteristics of Teachers for the Gifted and Talented

This section has reviewed current literature regarding the characteristics of teachers of the gifted and talented. The studies cited mainly reflect findings over the decade of the 1970's, but a number of earlier studies of relevance have been included when they merited special reference.

Criteria for judging teachers of the gifted and talented were found in expert opinions and surveys of student opinions. There was no evidence of unanimous agreement on a single profile; hence, several sources were presented as a basis for comparison, and as a means of reaching conclusions regarding the desirable characteristics which teachers should possess who plan to work with the gifted and talented youth.

Expert Opinion

In this connection, Gowan and Demos (1964) described the generally effective teacher as democratic, responsive, and stimulating. They suggested that the teacher who is best qualified to work with gifted children is exemplified by the following characteristics:

1. More responsive and organizing with broad background and subject matter knowledge
2. More vigorous, stimulating, original, and resourceful
3. More impartial, democratic, permissive, able to delegate tasks rather than give orders (page 392).

By 1971, Gowan and Torrance had added vitality, energy, strong intellectual background, and rigorous in their demands for students' learning to the above list (Gowan and Torrance, 1971). These statements summarized much of the literature of that era, with emphasis on intellectual style and relation to learners dominating the issue of the teacher's intellectual level.

At approximately the same time, Martinson (1971) reported on the opinions of 204 experts who had responded to the Advocate Survey developed by the U.S. Office of Education (Marland, 1971). These experts included state education officials, university professors, and education organization representatives. The majority of the

respondents gave a high priority to the following characteristics for a teacher of the gifted and talented:

> high interest in learning, possessing a rich academic background, high level of self-confidence, ability to work with children, maturity, open-mindedness, enthusiasm, and interested in continuing professional studies (Martinson, 1971).

Shifts in definitions of giftedness in the mid-1960's and early 1970's to a multi-talent concept, influenced the identification of these children, educational programs for them, and desirable characteristics for their teachers. Major educational emphases regarding the concept of creativity (Gowan and Bruch, 1967; Gowan, 1972; and Torrance and Myers, 1970) made a strong case for teaching experiences that were original, flexible, spontaneous, and intuitive. Additionally, Maker (1975) emphasized teaching for the gifted and talented that develops the creativity and problem-solving abilities required to help these children cope with their changing world.

Phillips (1975) reported on North Carolina's unique Competency Based Program for certification of teachers of the gifted and talented. The program offers an alternative to required graduate level courses and involves a visiting team's evaluation of a teacher's implementation of a comprehensive program for the education of the gifted and talented student. The evaluation includes the following checklist of desirable characteristics:

(1) challenges and is challenged by students; (2) open-minded to change and constructive criticism; (3) able to identify individual student learning styles; (4) positive self-image; (5) creative and innovative; (6) willing to give extra help to students; (7) able to find, make contact with, and use community resources; (8) able to communicate with others and listen; (9) able to reach equilibrium between cognitive and affective; (10) has the ability to transfer theory into practice; (11) recognizes and appreciates beauty; (12) helps students develop values. (page 46)

A May, 1977 survey conducted by Instructor Magazine reported over 1,500 responses to the question, "Do You Have to be Gifted to Teach the Gifted?" Responses included the following, listed by rank order, characteristics desirable for a teacher of the gifted and talented:

(1) Flexibility and acceptance of differences;
(2) skill at developing independent activities;
(3) originality, imagination and curiosity;
(4) desire to teach gifted and talented children; and
(4) persistence and follow-through. (page 21)

The majority of the responses came from teachers and school administrators, but some were from college professors, parents, grandparents, and students (Instructor Magazine, May 1977).

Finally, a summary of a profile of outstanding teachers was reported by Ruth Tschudin in the September 1978 issue of Instructor Magazine. These desirable characteristics were included because outstanding teaching was considered to be essential to education for all children and clearly, no less to the gifted and talented child. The opinions of 311 outstanding teachers--the majority were nominees or winners of local teacher-of-the-year awards--were compared with 109 teachers in the control group.

creativity in the gifted child (Renzulli and Hartman, 1971). Creativity tests are listed in the Appendix on page 125.

The identification of children possessing "leadership ability" has presented some problems. Even though the behavioral dimensions of Guilford's Structure of the Intellect Model, for example, do give some theoretical base for leadership; and Part IV, Leadership Characteristics, of Renzulli and Hartman's (1971) Scale for Rating Behavioral Characteristics of Superior Students has been useful for teacher use in estimating student leadership ability, there continue to be measurement problems in this area. These problems were recognized by Khatena (1978) when he observed that "leadership involves not only the individual but also dynamic relationships of the individual in a group relative to some purposeful activity or goal."

Additionally, Khatena (1978) reported the difficulty of measuring superior ability in the "visual and performing arts," and that few psychological measures are available. He concluded that "expert observation of behavior or products appears to be the best means of identification."

Finally, the area of "psychomotor ability" has a theoretical basis in the figural type of content found in Guilford's (1967) Structure of the Intellect Model, but the measure of abilities is not altogether free from problems (Khatena, 1978).

Identification of the gifted and talented among disadvantaged groups is often difficult because of the socioeconomic and cultural differences that exist. The most frequently used IQ tests have been standardized in communities of middle-to-upper-class children; hence, it has been reported that these tests do not take into account some of the economic and cultural realities found in culturally different communities and the learning and creative potential of the young people (Tuttle, 1978).

After a comprehensive study of procedures for the identification of disadvantaged gifted and talented children, Bruch (1971) found qualities and performance strategies previously ignored. The study revealed that the greatest strengths of disadvantaged black children lay in the figural (i.e., material that can be distinguished by form, shape, color, or texture) and symbolic (i.e., figural elements to which some meaning has been attached) components of the content dimension of Guilford's (1967) Structure of the Intellect Model.

In 1975, Bruch summarized the problem of identifying the gifted and talented among disadvantaged groups. First, the less a child is aculturated into the majority-culture mainstream, the more closely the identification procedures should reflect the cultural background of the child. Second, the standardized tests used should make some

adjustment for the language differences of children from culturally different groups. Third, teachers and other school personnel are usually trained and motivated to work with the middle-class students. Many school personnel, because of their own background, often have different expectations for or lack of sensitivity to individuals in culturally different groups. Consequently, school personnel working with a culturally different group should be sensitized to the needs and characteristics of that group so that they can better identify gifted and talented children in the group (Bruch, 1975b).

Pegnato and Birch (1959) found that teachers are frequently inaccurate in judgments concerning intellectually gifted children. They reported that teachers failed to nominate over half of the gifted students in a test group. Jacobs (1971) found teacher nomination of gifted individuals even less accurate. His study showed that primary teachers were able to identify only ten percent of the gifted children in their classes. In the same study, he found that parents were able to identify sixty-one percent of the gifted children.

In her summaries of research in the area of teacher nomination of gifted students, Gear (1976, 1978) reported that nomination by untrained teachers was of limited usefulness as a screening device, but that with appropriate training in identification of gifted students, teachers can accurately nominate individuals for gifted programs.

Several researchers have reported that a combination of approaches appears to be the most effective method of identifying gifted and talented students. Renzulli and Smith (1977), for example, found a case study approach comprised of achievement test scores, teacher ratings, past performance, and parent rating to be more effective than a traditional combination of group ability tests and individual IQ tests.

Jackson and Robinson (1977) recommended that children be given several opportunities to demonstrate intellectual and creative skills; that the identification committee should consider a child's best performance, instead of an average across several instruments; and that parent's anecdotes of their children's behavior be given equal weight with testing at very early ages.

Hilson (1978) reported on a screening instrument that was developed by a committee composed of the coordinator for a gifted/talented program, an educational psychologist, teachers of the gifted/talented, administrators, and parents of the gifted and talented. The case study utilizes this instrument to combine a review of group test data, individual intelligence test scores, teacher-observed characteristics and/or behaviors with teacher, principal, and parent recommendations. A copy of this screening instrument, along with exemplary ones from other Ohio schools, was included on pages 134-135 of Appendix D.

In the longest longitudinal study of the gifted since the studies of Terman, The Study of Mathematically Precocious Youth, directed by Julian Stanley, a battery of cognitive tests determines appropriate courses for students (George, 1976).

Summary

This chapter has reviewed the literature related to the training of teachers of the gifted and talented. Additionally, significant events in the historical development of the gifted child movement were reviewed with special emphasis on the training of teachers of the gifted and talented during the different periods of this movement.

Chapter Three has described the research methodology utilized in this study.

CHAPTER III

RESEARCH PROCEDURES

This chapter describes the overall methodology of the study, including the study population, methods used in data collection, data organization, statistical treatment (i.e., analysis of data and significance of testing and limitations in data interpretation).

The study employed a descriptive research methodology. Isaac and Michael (1976) observed that the purpose of descriptive research is "To describe systematically the facts and characteristics of a given population or area of interest, factually and accurately." As recommended by Siegel (1956), data was collected in nominal form or transferred to that form and displayed graphically in the form of tabular displays utilizing methods described below.

Study Population

All public school systems in Ohio and the fifty-one colleges approved for teacher education were surveyed. The Ohio Educational Directory 1977-1978 (Ohio Department of Education, 1977) was used to identify the contact person for each school system or college. The study population

was divided into one sub-population of 320 public school systems and one sub-population of fifty-one colleges.

These two sub-populations were selected in order to facilitate comparison of desired levels with actual status in the assessment of high-priority training needs for teachers of the gifted and talented. Guidelines developed by Lewis (1973) for the Division of Planning and Evaluation at the Ohio Department of Education were applied because the investigator found them to exemplary.

Data Collection

The data collection approach used in this study consisted of surveys, visitations, and interviews.

Surveys

Two survey instruments were constructed: one to collect data from public schools relating to gifted and talented programs and procedures and one--which collected pertinent data of a similar nature--for use in surveying Ohio colleges approved for teacher education. Public school survey instruments were sent to the superintendent of each Ohio public school system. College survey instruments were mailed to the chairperson of each Ohio college approved for teacher education. Copies of these survey instruments have been included as Appendix A on pages 125-126.

Letters of transmittal, with an endorsement by an authority figure known by most recipients, were prepared and mailed along with the survey instruments and a stamped return envelope. Copies of the letters of transmittal are included in Appendix B on pages 128 and 129.

The public school instrument used in this investigation is a modified version of the one validated by James (1960) in her study of gifted and talented programs in Connecticut schools. The college survey instrument is a refined version of the one validated by Laird and Kowalski (1972), in their study of college preparation programs for teachers of the gifted and talented.

The content validity and the face validity for both of these survey instruments were carefully examined through interactive and shaping processes with a review panel having expertise in the field. The panel was composed of Keith D. Barnes, educational psychologist; John A. Kirker, education department chairperson; Jeanne C. Hilson, gifted program coordinator; Beverly Ness, Title IV-C research associate; William W. Wayson, education college faculty member; and Gay Pinnell Wayson, Ohio Department of Education administrator.

In terms of the content validity of the instruments concerned, each item was adjudged by the panel to be highly significant in that each of them, the survey items, sought

out data related to critical needs in training programs for teachers of the gifted and talented and other related and definitive information. The final survey instrument items were tested through an interactive pretest and critique process.

The face validity of the instrumentation has been defined as the extent to which respondents view the survey instrument as being an important and understandable one. Face value was considered extremely important in this study as a way to maximize response from the surveyed populations. The face validity was carefully shaped through a variety of procedures.

First, the complexity and length of the instruments were kept at a minimu. Closed-end questions required only a simple "yes-no" or "check desired" type of response.

Second, the respondents were encouraged to take the opportunity to make personal commnets both in open-ended questions and in space provided for any additional ideas the respondent might have about the subject under investigation. Happily, this led to the inclusion of numerous personal respondent reactions which have been included in Chapter Four.

Third, the survey instruments were typically completed by an individual with experience, training, and responsibilities in the area of gifted and talented education.

Visitations and Interviews

Six Ohio public school systems were studied intensively through visitation and interview. Since the gifted and talented are found in all populations and in all economic circumstances, the study included two urban, two rural, and to suburban school systems. Interviews were conducted with program coordinators, teachers, and administrators working with gifted and talented students. Interview checklist questions were validated in the same way as the instruments previously described in the section on surveys. A copy of the Public School Interview Checklist has been included in Appendix C on page 131.

Additionally, six Ohio colleges offering coursework for teachers of the gifted and talented were studied through visitation and on-site interviews with education department staff and administrators. Analysis of the Ohio college survey responses revealed three predominant types of college course offerings for teachers of the gifted and talented: (1) colleges with no present offering of gifted and talented courses per se, but offering courses in the field of exceptionality which include information on the gifted and talented; (2) colleges offering undergraduate-level courses on the gifted and talented; and (3) colleges offering graduate-level courses on the gifted and talented. This

sample of six (out of the twelve reporting gifted and talented courses) was considered to be a representative one by the research advisor. A copy of the college interview checklist has been included in Appendix C. page 132.

Interview checklists and replication of the researcher's coding of interview responses by the research advisor were used to minimize data bias in accordance with recognized practice (Hopkins, 1976).

Finally, informal meetings were held with Gay Wayson and George Fichter, both with the Ohio Department of Education; and interviews were held with a "Federal Fellow" in the Office of Gifted and Talented, U.S. Office of Education. These meetings and interviews were planned to examine state and federal legislative action and administrative regulations regarding the gifted and talented. Pertinent findings from these sources have been included in Chapter Four.

Organization and Treatment of Data

Data organization and treatment included five procedures. First, all public school systems in Ohio were classified into one of the following: (1) City School Systems, (2) Exempted Village Systems, and (3) County Systems (Ohio Educational Directory 1977-1978, pages 23-263).

Second, all Ohio colleges approved for teacher education were listed (Ohio Educational Directory 1977-1978, pages 19-22).

Third, survey instruments were then pre-numbered for future identification in case the respondents inadvertently failed to identify their school system or college. Each survey instrument was checked off through the use of a master file, as they were received in the U.S. mail. After a three-week waiting period, a second mailing was made to a random sample of the non-respondent group. This later step was taken to reduce sampling bias in accordance with recommended practice (Borg and Gall, 1977; Isaac and Michael, 1976).

The response rate for public school systems has been included in Table 2 below.

TABLE 2

A DISTRIBUTION OF SURVEY RESPONSES
FROM PUBLIC SCHOOL SYSTEMS IN OHIO

Classification		Systems Surveyed	Systems Responding (Number)	(Percent)
City School Systems		184	149	80.9
Exempted Village Systems		49	39	79.6
County Systems		87	67	77.2
N = 320	Total	320	255	79.7

The response rate for the Ohio college survey has been displayed in Table 3 below.

TABLE 3

THE RESPONSE TO THE SURVEY OF OHIO COLLEGES APPROVED FOR TEACHER EDUCATION

Number of colleges surveyed	Number responding	Percent responding
51	41	80.4

N = 51

Fourth, six representative Ohio public school systems and six representative Ohio colleges approved for teacher education were selected from the survey respondents and scheduled for on-site visitations and interviews to study gifted and talented programs and courses available. As these visits and interviews were completed, each interview checklist was included in the active file.

Finally, data in the active data file were displayed in tabular form and subjected to analyses suggested by the research advisor.

Data Analysis

Four statistical methods were utilized in the analysis of the data collected for this study. First, simple

percentage comparisons were made on survey instrument items (e.g., on the public school survey instrument, what percent of the Ohio public schools surveyed provide inservice training in cooperation with a college?). These data were displayed in tabular form and have been included in Chapter Four. When data was present, Ohio public schools, colleges, and teachers of the gifted were compared. A detailed discussion of data analyzed using this method is included in Chapter Four.

Third, in cases where there were significant differences in responses, Chi-Square (x^2) was applied to determine the significance of differences between the independent groups. Isaac and Michael (1976) define Chi-Square (x^2) as follows:

> Chi-Square is a measure of squared deviations between observed and theoretical number in terms of frequencies in categories or cells of a table, determining whether such deviations are due to sampling error or some interdependence or correlation among the frequencies. It involves a comparison of frequencies of two or more responding groups. Very useful in tables involving frequencies of yes-no answers. (page 116)

These data have been displayed in crossbreak form which has the graphic power of pointing out similarities or differences in sharp contrast. The Chi-Square test has been applied and a test of significance of the derived Chi-Square value performed. The data displayed in crossbreak form has been included in Chapter Four.

Fourth, responses to open-ended questions in the survey instrument (e.g., what are desirable characteristics of teachers for the gifted and talented?) have been described and analyzed in Chapter Four.

Finally, the ten basic research questions--previously discussed in Chapter One--important to this study are as follows:

1. What programs for the gifted and talented child are in operation in the elementary schools of Ohio?

2. Which Ohio public school systems have a designated coordinator for their gifted/talented program?

3. What criteria are used in Ohio public schools to identify the gifted and talented?

4. What type(s) of preservice and/or inservice training do Ohio public schools and Ohio colleges approved for teacher education consider as desirable for a teacher of the gifted and talented?

5. What characteristics do Ohio public schools and Ohio colleges approved for teacher education consider as desirable ones for a teacher of the gifted and talented?

6. Which Ohio public school systems provide inservice training for teachers of the gifted and talented in cooperation with Ohio colleges?

7. Which Ohio colleges approved for teacher education offer inservice training and/or coursework to teachers of the gifted and talented?

8. If Ohio colleges approved for teacher education offer coursework to teachers of the gifted and talented, is it at the undergratuate, graduate, or doctoral level?

9. What evidence exists of community interest in programs for the gifted and talented?

10. Are Ohio public school systems and Ohio colleges approved for teacher education in favor of Ohio certification for teachers of the gifted and talented?

These basic research questions have been analyzed and discussed in Chapter Four along with selected subjective comments of the respondents to the surveys and interviews.

Limitations and Data Interpretations

One limitation associated with this study, which used survey instruments, was the assumption that respondent answers were based on facts. Additionally, the researcher had no control beyond choosing what data to gather; hence, interpretations are subjective and always open to some criticism. The use of appropriate statistical treatments, described above, has maximized the accuracy of data interpretations and subsequent analysis procedures.

Summary

This chapter has presented a description of the research methodology and procedures utilized in the study. The chapter included a discussion of the study population, data collection, organization and treatment of the data, data analysis, and limitations and data interpretation.

The following chapter contains the presentation and analysis of the findings of the study.

CHAPTER IV

FINDINGS

This chapter of the investigation has presented the major findings of the study for examination and consideration by the reader following the research procedures and design described earlier in Chapter Three. The data treatments applied in this investigation consisted of surveys, visitations, and interviews.

The findings have been reported with respect to furnishing evidence for the acceptance or rejection of each of the ten research questions, previously cited in Chapter Three, pages 63-64, considered by the research advisor as those serving as the major research focus of this investigation. The ten research questions are:

1. What programs for the gifted and talented child are in operation in the elementary schools of Ohio?
2. Which Ohio public school systems have a designated coordinator for their gifted and talented program?
3. What criteria are used in Ohio schools to identify the gifted and talented?
4. What type(s) of preservice and/or inservice training do Ohio public schools and Ohio colleges approved for teacher education consider as desirable for a teacher of the gifted and talented?

5. What characteristics do Ohio public schools and Ohio colleges approved for teacher education consider as desirable ones for a teacher of the gifted and talented?

6. Which Ohio public school systems provide inservice training for teachers of the gifted and talented in cooperation with Ohio colleges?

7. Which Ohio colleges approved for teacher education offer inservice training and/or coursework to teachers of the gifted and talented?

8. If Ohio colleges approved for teacher education offer coursework to teachers of the gifted and talented, is it at the undergraduate, graduate, or doctoral level?

9. What evidence exists of community interest in programs for the gifted and talented?

10. Are Ohio public school systems and Ohio colleges approved for teacher education in favor of future Ohio certification for teachers of the gifted and talented?

Presentation of Findings

Research Question Number One

The development and validation of the survey instruments used in this study ahve been discussed earlier in Chapter Three. Data from the Ohio Public School Survey, used to test the acceptability of research question number one, has been displayed in Tables 4, 5, 6, and 7. Table 4 has examined data pertaining to gifted and talented programs and their designated coordinators as reported by Ohio city, county, and exempted village school systems. These data

indicate that only ninety-seven (thirty-eight percent) of the public school systems have an educational program for the gifted and talented as defined in Program Standards for School Foundation Units for Gifted Children, effective November 1, 1975, in Ohio. Additionally, it was observed that during the 1978-1979 school year, a designated program coordinator was providing a leadership role for these programs in seventy-eight (eighty percent) of those systems which had reported having a gifted and talented program in operation.

TABLE 4

DATA ON GIFTED AND TALENTED PROGRAMS IN THE PUBLIC ELEMENTARY SCHOOLS OF OHIO

System Classification	Systems Reporting Programs (no.)	(%)	Systems Reporting Coordinators (no.)	(%)
City school systems (N = 149)	66	44.3	48	72.7
County school systems (N = 67)	26	38.8	26	100.0
Exempted village systems (N = 39)	5	12.8	4	80.0
Total	97	38.0	78	80.4
(Total N = 255)				

In terms of the type of a given school district (e.g., city, county, or exempted village), only 12.8 percent or five of the thirty-nine responding exempted villages reported an operational gifted/talented program. City and

county system respondents indicated that 44.3 percent and 38.8 percent, respectively, reported an operational gifted/talented program. A closer inspection of Table 4 will provide the reader with information regarding the staffing of coordinators for gifted/talented programs by type of school systems in Ohio.

The data displayed in Table 5 have listed the number of years that gifted/talented programs have been in operation in Ohio school systems. Inspection of these data indicated that the large majority of the programs (sixty-three percent) have been in operation for one to two years. However, analysis of survey responses indicated that several programs have been in operation for many years. For example, the Cleveland Major Works Program, fifty years; the Euclid City Program, twenty years; the Fairfield Park Program, fifteen years; and the Garfield Heights City Program, twenty years.

It additionally was significant to note that, of the three types of school districts studied, none of the exempted village systems has had a gifted and talented program in existence for more than two years.

TABLE 5

THE NUMBER OF YEARS GIFTED AND TALENTED PROGRAMS HAVE BEEN IN OPERATION

System Classification	Systems with Each Number of Years in Operation 1-2	3-4	5-6	7-8	9+
City school systems	40	9	2	3	12
County systems	18	6	1	0	1
Exempted village systems	5	0	0	0	0
Total	63	15	3	3	13
(N = 97)					

Table 6 examined the administrative arrangement, the kind of student grouping, and enrichment programs reported in the Public School Survey. Examination of these data revealed that ninety-six (98.9 percent) of the responding school systems use enrichment experiences in the regular classroom, fifty-nine percent also use grouping in a homogeneous class, and forty-six percent use acceleration in grade level concepts.

TABLE 6

THE TYPES OF GIFTED AND TALENTED PROGRAMS OFFERED IN THE ELEMENTARY SCHOOLS OF OHIO

SYSTEM CLASSIFICATION	Enrichment Within the Regular Classroom (No.)	(%)	Grouping in a Homogeneous Class (No.)	(%)	Acceleration in Grade Level (No.)	(%)
City school systems	66	100	38	57.6	27	40.9
County school systems	25	96.2	17	65.4	16	61.5
Exempted village systems	5	100	3	66.6	2	40.0
Total	96	98.9	58	59.7	45	46.4

(N = 97)

Six Ohio public school systems were visited on site for the purpose of studying their gifted and talented programs directly. They were (1) Bexley, (2) Columbus, (3) Delaware, (4) Marion, (5) Pickerington, and (6) Toledo. A comparison of the programs in these school systems has been made in the data displayed in Table 7; and a detailed description of each program has been included in the Appendices of this investigation on pages 138-145.

Inspection of the data in Table 7 revealed that enrichment in the regular classroom and grouping in a homogeneous class were used most often as program strategies. This was found to be in agreement with the statewide Ohio data previously shown in Table 6. The two relatively large

cities in the study sample, Columbus and Toledo, have full-time gifted and talented program coordinators; consequently, they offer what may be described as a more comprehensive program as may be seen by examining their respective programs which appear in the Appendices of this study on pages 138-145.

TABLE 7

A COMPARISON OF THE GIFTED AND TALENTED PROGRAMS IN SIX OHIO PUBLIC SCHOOLS SELECTED FOR VISITATION

Program Characteristics	Bexley	Columbus	Delaware	Marion	Pickerington	Toledo
Type of Program						
Enrichment within the classroom	x	x	x			x
Grouping in a homogeneous class	x			x	x	x
Acceleration in grade level	x	x				x
Number of Years in Operation						
1-2	x		x	x	x	
3-4		x				
5-6						x
Program Coordinator						
Full-time coordinator		x	x			x
Teacher-coordinator	x			x	x	
N = 6						

Research Question Number Two

The data in Table 4 revealed that 80.4 percent of the responding school systems have a designated gifted and talented program coordinator. The titles of the persons designated as coordinators were varied. They have been listed in order of frequency reported and are: assistant superintendent, teacher-coordinator, coordinator, teacher, director of student services, and supervisor.

Examination of the Gifted/Talented Programs list published by the state of Ohio (1978) revealed that only twenty-nine percent of the gifted/talented programs in operation during the 1978=1979 school year employed a coordinator who met the requirements for state funding. The Ohio Program Standards for School Foundation Units for Gifted Children lists four qualifications for the coordinator of a gifted/talented program. They are (1) hold a valid teaching certificate, (2) hold a master's degree, (3) have completed coursework in psychology and education of the gifted, and (4) show evidence of a minimum of two years of successful teaching experience.

Assuredly, a program coordinator who meets state standards is prepared to provide counsel, advice, and leadership for inservice training offered to teachers in their gifted/talented program. On the other hand, the

titles of the designated coordinators reported by seventy-one percent of the responding Ohio public school systems suggested that the coordination effort was a part-time one; and that the coordinator's lack of some--or all--of the four qualifications listed above posed a real question of how much counsel, advice, and leadership was available for the training of gifted and talented teachers in those systems employing sub-qualified program coordinators.

Research Question Number Three

Table 8 displayed the types of criteria used by Ohio public schools to identify gifted and talented children. Inspection of the data in this table indicated the following: (1) all of the responding systems utilized teacher judgment, (2) all but two systems utilize group intelligence tests, (3) approximately two-thirds of the systems utilize individual intelligence tests, and (4) all systems utilize "other" criteria, in varying degrees, to identify the gifted and talented.

Analysis of individual responses to the Public School survey revealed a long list of evaluation instruments used to identify the gifted and talented. The ten most frequently reported instruments have been listed in order of frequency.

They are (1) Stanford-Binet Intelligence Scale, (2) Wechsler Intelligence Scale for Children, (3) California Test of Mental Maturity, (4) Slosson Intelligence Test, (5) Otis-Lennon Mental Ability Test, (6) California Short-Form Test of Mental Maturity, (7) Lorge-Thorndike Intelligence Test, (8) Henmon-Nelson Test of Mental Maturity, (9) Renzulli-Hartman Superior Student Behavior Checklist, and (10) Torrance Test of Creative Thinking. Under the category of "other" types of identification criteria, the five types of evaluation factors most frequently reported were (1) student achievement, (2) parent and peer recommendation, (3) recommendation by the teacher and/or principal, (4) placement committee recommendation, and (5) use of a screening instrument or testing matrix.

TABLE 8

CRITERIA USED BY OHIO PUBLIC SCHOOLS FOR THE IDENTIFICATION OF THE GIFTED AND TALENTED

Type of Identification Criteria Used	Public School Systems					
	City System		County System		Exempted Village	
	(No.)	(%)	(No.)	(%)	(No.)	(%)
Teacher judgment	66	100	26	100	5	100
Group Intelligence Test	66	100	26	100	2	40.0
Individual Intelligence Tests	51	77.3	25	96.1	3	60.0
Other	46	69.7	3	60.0	19	63.3
(Total N = 97)	N = 66		N = 26		N = 5	

Research Question Number Four

Data regarding the types of preservice and inservice training considered as desirable by three respondent groups has been displayed in Table 9. These data showed that Ohio public school system respondents ranked training methods for teachers of the gifted and talented in a particular order. Their preferences, based on frequency of type mentioned, were (1) graduate-level courses, (2) inservice training, and (3) undergraduate-level courses. In comparison, Ohio colleges approved for teacher education who responded to the College Survey reported the following rank order of preference: (1) undergraduate-level courses, (2) graduate-level courses, and (3) inservice training. The third subgroup of respondents, teachers of the gifted and talented, reported yet another order of preference. Their preferences were as follows: (1) inservice training, (2) undergraduate-level courses, and (3) graduate-level courses.

TABLE 9

DATA ON THE TYPES OF PRESERVICE AND INSERVICE TRAINING CONSIDERED AS DESIRABLE BY OHIO PUBLIC SCHOOLS, OHIO COLLEGES APPROVED FOR TEACHER EDUCATION, AND TEACHERS OF THE GIFTED AND TALENTED

Respondents	No. of responses	Undergraduate Level Courses		Graduate Level Courses		Inservice Training	
		No.	%	No.	%	No.	%
City school systems	149	48	32.2	81	52	74	49.6
County school systems	67	24	35.8	28	42	34	50.7
Exempted village systems	39	1	2.6	12	31	7	17.9
(N = 255) Total	255	73	28.6	121	48	115	45.1
Ohio colleges approved for teacher education (N = 41)	41	17	41.5	16	39	9	21.9
Teachers of the gifted and talented (N = 30)	30	26	86.6	11	37	30	100

NOTE: Percent figures will not equal 100 because some respondents selected more than one type of training.

Research Question Number Five

The data examined in Table 10 detailed the top ten desirable characteristics for a teacher of the gifted and talented, in order of frequency, reported by the three respondent groups shown in the table. Inspection of these data suggested that a profile of desirable characteristics for a teacher of the gifted and talented would include (1) creativeness, (2) flexibility, (3) high energy level, (4) a teacher who individualizes instruction, (5) possess a good sense of humor, (6) highly intelligent or gifted themselves, (7) possess a knowledge of the gifted and talented, and (8) able to share knowledge with and learn from other teachers and the community.

TABLE 10

A COMPARISON OF THE TOP TEN DESIRABLE CHARACTERISTICS FOR A TEACHER OF THE GIFTED AND TALENTED REPORTED BY BY THREE DIFFERENT GROUPS

Public School Survey	Ohio College Survey	Teachers of the Gifted and Talented
1. creative	1. creative	1. creative
2. highly intelligent	2. good academic background	2. flexible
3. individualizes instruction	3. gifted themselves	3. energetic
4. flexible	4. knowledge of gifted	4. desire to work with gifted
5. energetic	5. flexible	5. individualizes instruction
6. academically strong	6. a facilitator	5. design good learning centers
7. humorist	7. individualizes instruction	7. shares and learns from others
8. likes gifted	8. energetic	8. humorist
9. innovative	9. humoristic	9. knowledge of gifted
10. enthusiastic	10. continuing education	10. knowledge of outside resources

Research Questions Six and Seven

Data pertinent to these questions have been combined in Table 11 in order to facilitate comparison. The data show that ninety-seven Ohio public school systems, fifty-four percent of those responding, have been actively involved in cooperative-inservice training programs with a college or

colleges. The highest level of involvement, seventy-three percent, was reported by county school systems. In comparison, only twenty-nine percent of the responding colleges reported involvement in cooperative inservice training programs with Ohio public school systems.

TABLE 11

A COMPARISON OF OHIO PUBLIC SCHOOL AND OHIO COLLEGE INVOLVEMENT IN COOPERATIVE-INSERVICE TRAINING FOR TEACHERS OF THE GIFTED AND TALENTED CHILD

		Entity Involvement in Cooperative-Inservice Training			
		Yes		No	
Respondents	Number	Number	%	Number	%
City school systems	66	31	46.9	35	53.1
County school systems	26	19	73.1	7	26.9
Exempted village systems	5	2	40.0	3	60.0
Total (N = 97)	97	52	53.6	45	46.4
Ohio colleges approved for teacher education (N = 41)	41	12	29.2	29	70.3

The second process used to treat these data, as detailed in Chapter Three of this study, was the calculation of Chi-Square tests of independence. Table 12 has displayed these data for examination and consideration by the reader.

TABLE 12

A CHI-SQUARE ANALYSIS OF CROSSBREAKS BY OHIO PUBLIC SCHOOL SYSTEM AND OHIO COLLEGE INVOLVEMENT IN COOPERATIVE-INSERVICE TRAINING PROGRAMS FOR TEACHERS OF THE GIFTED AND TALENTED

Respondents	Number Involved	Number Not Involved
Public School Systems	52	45
Ohio colleges approved for teacher education	12	29

$X^2 = 6.46$
df = 1
P = 0.01

In considering the data displayed in Table 12, clearly the inservice training involvement of Ohio public school systems, when compared with Ohio colleges approved for teacher education, was more significant than the 0.05 level established for these data; consequently, one may reasonably conclude that these two comparatives were operating independently of one another. Certainly, it appeared that the expectation level of the entities compared here (e.g., public schools and colleges) varied significantly in terms of their levels of involvement and expressed need for inservice training experiences.

Research Question Number Eight

Data displayed in Table 13 recorded the number of respondent Ohio colleges offering undergraduate, graduate,

doctoral, and practicum level courses for teachers of the gifted and talented. Inspection of this data demonstrated that only twelve, or twenty-nine percent, of these colleges offered such courses. The majority of these course offerings, eighty-three percent, were at the undergraduate level. Graduate-level courses have been offered by only five (forty-two percent) of the colleges; doctoral level by only one college; and practicum course experience by three colleges.

TABLE 13

A COMPARISON OF THE NUMBER OF OHIO COLLEGES OFFERING DIFFERENT TYPES OF COURSEWORK FOR TEACHERS OF THE GIFTED AND TALENTED

Course Offerings for Teachers of the Gifted/Talented	No. of Responses	Yes Responses No.	Yes Responses %	No Responses No.	No Responses %
Undergraduate Level	12	10	83.3	2	16.7
Graduate Level	12	5	41.6	7	58.4
Doctoral Level	12	1	8.3	11	91.7
Practicum Experience	12	3	25.0	9	75.0
Exceptional Child with information on the Gifted/Talented	22	20	90.1	2	9.9
Colleges reporting gifted/talented courses	41	12	29.3	29	70.7

NOTE: Percent figures will not equal 100 because some colleges offer courses at all levels displayed.

Research Question Number Nine

Table 14 contains a comparison of the Ohio public school systems and Ohio colleges approved for teacher education who reported evidence of community interest in programs for the gifted and talented child. Less than half, forty-one percent, of the responding Ohio public school systems reported community interest in programs for the gifted and talented. In comparison, fifty-one percent of the responding Ohio colleges reported evidence of community interest in such programs.

TABLE 14

A COMPARISON OF THE NUMBER OF OHIO PUBLIC SCHOOL SYSTEMS AND OHIO COLLEGES REPORTING COMMUNITY INTEREST IN PROGRAMS FOR THE GIFTED AND TALENTED CHILD

Respondents	No. of Responses	Entities Reporting Community Interest	
		Number	Percent
City school systems	149	76	49.0
County school systems	67	20	73.7
Exempted village systems	39	10	25.6
(N = 255) Total	255	106	41.6
Ohio colleges approved for teacher education (N = 41)	41	23	56.1

These data were further analyzed by calculation of a Chi-Square test of significance. Table 15 has displayed these data for examination and consideration by the reader.

TABLE 15

A CHI-SQUARE ANALYSIS OF CROSSBREAKS BY OHIO PUBLIC SCHOOL SYSTEMS AND OHIO COLLEGES REPORTING EVIDENCE OF COMMUNITY INTEREST IN PROGRAMS FOR THE GIFTED

Respondents	Communities Reporting Interest	Communities Reporting No Interest
Ohio public school systems	106	149
Ohio colleges approved for teacher education	23	18
		$X^2 = 3.04$ df = 1 $P = >0.10<0.05$

In considering the data displayed in Table 15, a statistical significance was noted in the analysis of crossbreaks. The obtained Chi-Square value of $X^2 = 3.04$ had a probability value (P) of $>0.10<0.05$ with one degree of freedom (df). Clearly, responding Ohio colleges reported significantly more community interest in programs for the gifted and talented child than did Ohio public schools.

Research Question Number Ten

Data displayed in Table 16 focused on comparison of responses from Ohio public school systems and Ohio colleges approved for teacher education regarding future Ohio certification for teachers of the gifted and talented. These

data show that in general, more than half of the responding public school systems, fifty-seven percent, supported future Ohio certification. Exempted village systems were an exception, with only thirty-five percent responding in favor of future Ohio certification. In comparison, the response of Ohio colleges was significantly different, with fifty-seven percent registering negative responses to the question of future Ohio certification for teachers of the gifted and talented.

TABLE 16

A COMPARISON OF RESPONSES FROM OHIO PUBLIC SCHOOL SYSTEMS AND OHIO COLLEGES REGARDING FUTURE CERTIFICATION FOR TEACHERS OF THE GIFTED AND TALENTED

Respondents	No. of Responses	Entities Responding Yes Number	%	No Number	%
City school systems	130	70	53.8	60	46.2
County school systems	59	41	69.5	18	30.5
Exempted village systems	20	7	35.0	13	65.0
Total (N = 209)	209	118	56.5	91	43.5
Ohio colleges approved for teacher education (N = 37)	37	16	43.2	21	56.8

A Chi-Square test, displayed in Table 17, treated the statistical significance of the difference in responses between Ohio public school systems and Ohio colleges approved

for teacher education regarding future Ohio certification for teachers of the gifted and talented. A Chi-Square value of $X^2 = 2.24$ was obtained which was significant at the 0.05 level. Clearly, there was a significant difference in the responses of Ohio public school systems when compared with Ohio colleges and the responses were independent of each other.

TABLE 17

A CHI-SQUARE ANALYSIS OF CROSSBREAKS BY OHIO PUBLIC SCHOOL SYSTEMS AND OHIO COLLEGES RESPONSES WITH REGARD TO FUTURE OHIO CERTIFICATION FOR TEACHERS OF THE GIFTED AND TALENTED CHILD

Respondents	Yes Responses	No Responses
Ohio public school systems	118	91
Ohio colleges approved for teacher education	16	21
		$X^2 = 2.24$ df = 1 P = 0.05

Public School Visitations and Interviews

The programs for gifted and talented students in six Ohio public school systems were studied through visitations and interviews. The public school systems studied were (1) Bexley, (2) Columbus, (3) Delaware, (4) Marion,

(5) Pickerington, and (6) Toledo. Descriptions of these programs have been included in the Appendix on pages 138 to 145.

Interviews were conducted with program coordinators, teachers, and administrators working with the gifted and talented. The majority of the interviews were with teachers, who responded to the Public School Interview Checklist exhibited on page 131 of the Appendix.

Response data from teachers to research questions one, three, four, and five have been displayed in Tables 7, 8, 9, and 10 respectively for ease of comparison with similar data from Ohio public schools and colleges. Additionally, other data from teacher responses pertinent to research question number five have been displayed in Table 18. Research question number five asked, "What characteristics do Ohio public schools and Ohio colleges approved for teacher education consider as desirable ones for a teacher of the gifted and talented?"

An examination of these data indicated that the college preparation of the interviewees ranged from the bachelors to the doctoral level, with the majority (eighty-three percent) of the interviewees possessing a bachelor's degree. Further examination of the respondents' answers

revealed that twenty-two, or seventy-three percent, of the teachers had combined both college coursework and inservice training to develop the specific skills required to work with the gifted and talented student. The data also showed that, although over half (66.6 percent) of these teachers had been teaching the gifted and talented for two years or less, they were experienced teachers with at least three years of classroom experience prior to teaching in the gifted and talented program.

TABLE 18

DATA OBTAINED FROM PUBLIC SCHOOL VISITATIONS AND INTERVIEWS REGARDING CHARACTERISTICS OF TEACHERS OF THE GIFTED AND TALENTED

Characteristics	Number	Percent
Education - highest level		
Bachelor's	25	83.3
Master's	4	13.3
Doctorate	1	3.4
Gifted/talented training		
college only	4	13.3
college and inservice	22	73.3
inservice only	4	13.3

	Years of Experience							
	1-2		3-4		5-6		7 or more	
	number	%	number	%	number	%	number	%
gifted	20	66.6	4	13.4	6	20.0	-	-
other	-	-	13	43.3	6	20.0	11	36.7
(N = 30)								

In response to the interview question which was: "Based upon your teaching experience, what course(s) or inservice training do you consider to be most helpful in guiding and teaching the gifted child?" These experienced teachers included various responses. The six most frequently mentioned ones were: (1) development of student curricula, (2) enrichment activities, (3) instructional techniques for teaching the gifted and talented, (4) materials and media for classroom learning centers, (5) creativity development strategies, and (6) psychology of the gifted and talented, including identification and child development.

College Visitations and Interviews

The training programs available to teachers of the gifted and talented at six Ohio colleges were studied through visitations and interviews. The colleges were (1) Capital University, Columbus, Ohio; (2) Kent State University, Kent, Ohio; (3) The Ohio State University, Columbus, Ohio; (4) University of Toledo; (5) Wright State University, Dayton, Ohio; and (6) Xavier University, Cincinnati, Ohio. Each of these colleges has met the Standards for Accreditation of Teacher Education previously cited in Chapter Two on page 36 and is approved for teacher education by the state of Ohio.

These six institutions and their fourteen branch campuses provide educational facilities for the residents of the major geographic locations in Ohio. A map of Ohio showing the location of main campuses and the branch campus networks of these institutions has been included in Appendix H on page 156.

Interviews were conducted with education department faculty members at the six colleges under study to determine: (1) the scope and sequence of courses available to teachers of the gifted and talented and (2) the types and frequency of inservice training offerings for these teachers. Descriptions of the college course and inservice offerings for teachers of the gifted and talented at each institution have been included in the Appendices on pages 149 to 154. Examination of these indicate, as did analysis of the college survey results, that only one university in Ohio, Kent State University, has offered a degree program at the doctoral level with specific emphasis on the education of the gifted; and that only two universities, Kent State University and The Ohio State University, offer a degree program at the master's level with specific emphasis on the education of the gifted.

Kent State University

Kent State University reported offering courses concerned with the gifted for the past twenty-five years.

The gifted education coordinator, Wilber Simmons, reported courses concerned with the gifted in the areas of education at the undergraduate level and in special education at the graduate level. A description of these courses is included in Appendix G on page 153.

Course offerings were reported at three levels: (1) undergraduate degree with a program minor or concentration; (2) graduate (master's level) degree with a program major, program minor or concentration; and (3) graduate (doctoral level) degree.

Five courses with the same course names were reported at the undergraduate and graduate levels. Examination of the course description, included in Appendix H on page 153, showed that the scope of these courses is somewhat different. The courses are (1) Nature and Needs of the Gifted Child, (2) Instructional Processes for Gifted Children, (3) Student Teaching: Gifted, (4) Field Experience with the Gifted, and (5) Workshop: Gifted.

Three additional courses at the graduate level were reported. They are (1) Seminar in the Gifted, (2) Individual Investigation in Gifted, and (3) Research Special Education - Gifted. The sequence of this coursework was reported to be dependent on the program's design as major, minor, or concentration.

Course offerings reported at the doctoral level included the following: (1) Seminars, (2) Research, (3) Practica, (4) Internships, (5) College Teaching, (6) Program Development and Evaluation, and (7) Inservice Strategies for Teachers of the Gifted.

Inservice training is offered on a demand basis five to ten times each year. Examination of the map of Ohio on page 156 of the Appendices showed that Kent State University and its branch campuses made gifted course and inservice offerings available to a wide geographic area in the north-eastern part of Ohio.

The Ohio State University

The Ohio State University has offered courses with emphasis on the education of the gifted child for the past six years. The program coordinator, Raymond Swassing, reported that graduate-level course concerned with the gifted are offered within the Faculty for Exceptional Children. A description of the scope and sequence of course-work leading to a master's degree has been included in Appendix G on pages 150-151.

Course offerings reported at the graduate level included the following: (1) Teaching the Gifted - Issues and Problems, (2) Teaching the Gifted - Instructional and

Curricular Adaptations, (3) Seminar on Identification and Evaluation, (4) Field Experience with the Gifted, (5) Independent Study, (6) Workshops: Gifted, and (7) Group Studies: Gifted.

Inservice training is offered six to ten times each year on a demand basis. Examination of the map of Ohio on page 156 of Appendix H showed that the location of Ohio State University's main and branch campuses makes gifted course and inservice offerings available to teachers in a wide geographic area in central Ohio.

Wright State University

Wright State University reported offering graduate-level coursework with concentration on the gifted for the past two years. The coordinator of the program, Dr. Marlene Bireley, reported two course offerings: (1) Gifted Children and Youth - an overview and (2) Teaching the Gifted - directed teaching experience. A description of these courses is included in Appendix G on page 154.

Examination of the map of Ohio on page 156 of Appendix H revealed that the main campus-branch campus relationships of Wright State University make gifted course and inservice offerings available to a wide geographic area in the western part of Ohio.

University of Toledo

Interviewees at the University of Toledo reported offering courses concerned with the education of the gifted for the past three years. The coordinator of the program, Dr. H. Wells Singleton, reported that one course, Psychology and Education of the Gifted, is offered at both the undergraduate and graduate levels. A description of this course is included in Appendix G on page 154. Additionally, the University of Toledo offers two courses with direct application potential for teachers of the gifted. They are (1) Creative Dramatics for Children and (2) Creative Writing for Children. Inservice offerings were reported on a demand basis, usually two times each year. Dr. Singleton reported consulting work with the Metropolitan Center for the Gifted and Talented, Toledo, Ohio and advisory status with the Toledo Area Association for the Gifted.

Examination of the map of Ohio on page 156 of the Appendices showed that the location of the University of Toledo makes gifted course and inservice offerings available to the geographic area in the northwestern part of Ohio.

Xavier University

Xavier University reported offering education course for teachers of the gifted for the first time in the 1978-1979 school year. The coordinator of the gifted program,

Dr. Lee Rinsky, reported course offerings at the graduate and undergraduate level which included the following: (1) Teaching the Gifted: Summer Workshop, (2) Educating the Exceptional Child: Current educational trends for Gifted.

Inservice training and workshops are offered on a demand basis, usually two times each year. Examination of the map of Ohio on page 156 of Appendix H showed that Xavier University makes gifted course and inservice offerings available to a wide geographic area in the southwestern part of Ohio.

Capital University

Capital University was selected for visitation and interviews because it was considered representative of the majority, seventy percent, of Ohio colleges which had not reported gifted course offerings. Capital University has, however, reported offering a course in the field of exceptionality in the child, which includes subject matter directly related to the education of the gifted and talented child. Additionally, the education department chairman, Dr. John Kirker, reported that the faculty of this institution has also included techniques to be applied with the gifted and talented in several of their methods courses.

A College Interview Checklist was used in each interview to ensure that the same questions, in the desired

sequence, were asked at each interview. The validation of this instrument has been described in Chapter Three. A copy of the checklist is included in Appendix C on page 132.

Data obtained from college visitations and interviews regarding course and inservice training offerings for teachers of the gifted and talented have been displayed in Table 19.

TABLE 19

DATA OBTAINED FROM SELECTED OHIO COLLEGES OF TEACHER EDUCATION REGARDING THE TRAINING OF TEACHERS OF THE GIFTED AND TALENTED CHILD

Courses and Inservice Training Available to Teachers of the Gifted/Talented	Capital University	Kent State University	The Ohio State University	University of Toledo	Wright State University	Xavier University
Undergraduate-level course(s)		x	x	x		x
Graduate-level course(s)		x	x	x	x	x
Degree program at the master's level		x	x			
Degree program at the doctoral level		x				
Practicum		x	x			
Internship		x				
Inservice Training		x	x	x	x	x
Course in the field of exceptionality which includes information on the gifted and talented child	x	x	x	x	x	x
(N = 6)						

Informal Meetings with Ohio Department of Education Personnel

Informal meetings were held with George Fichter, Educational Consultant for the Gifted with the Ohio Department of Education and with Dr. Gay Pinnell Wayson, Assistant Director for the Division of Teacher Education and Certification with the Ohio Department of Education. These meetings acquainted the writer with Ohio policy decisions, amde through legislative action and administrative regulation, regarding the gifted and talented program offerings in Ohio schools; and, the status of teacher education and certification in Ohio at the time of this study.

Mr. Fichter was helpful in obtaining the following information: (1) legislative sanction for gifted and talented programs, which is detailed in the Ohio Revised Code under Section 3301.07 (Powers of State Board). This section reads as follows:

> The State Board of Education shall exercise under the acts of General Assembly general supervision of the system of public education in the state. In addition to the powers otherwise imposed on the State Board under the provisions of law, such Board shall have the following powers . . . (1) For the purpose of encouraging the development of special programs of education for academically gifted children, employ competency persons, to analyze and publish data, promote research, advise and counsel with boards of education, and encourage

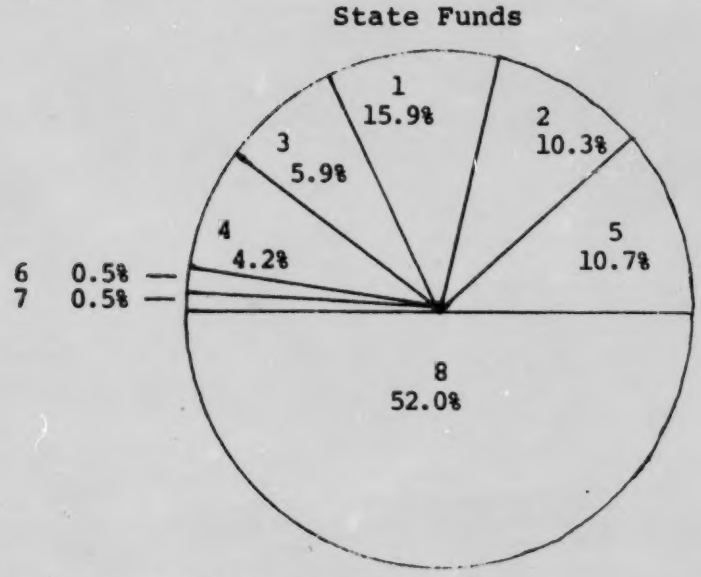
> the training of teachers in the special instruction of gifted children, the board may provide financial assistance out of any funds appropriated for developing and conducting programs of education for academically gifted children. (Ohio Laws for Special Education, 1979.)

The second item of information provided by Mr. Fichter was (2) financial assistance for special programs of education for academically gifted children was funded at $300,000 for each fiscal year of the 1977-1979 Biennium by the Ohio Legislature (Ohio Legislative Budget Office, 1977).

Inspection of the appropriations shown in Figure One indicated that the funding level of $300,000 was less than one percent (0.09) of the total state funds appropriated for special education. The Ohio Department of Education, in their Recommendations for Legislative Consideration, 1980-1982 Biennium, requested that this financial assistance be increased to $2.4 million (Fichter, 1979). Assuredly, a recommendation for a nearly ten-fold increase in funding indicated that Ohio gifted programs were, according to most experts in the field, underfunded during the 1977-1979 Biennium.

FIGURE 1

1977-1979 BIENNIUM APPROPRIATIONS
FOR EDUCATION IN OHIO



$2,946,304,020

1 - Other Aid to School Districts	$ 467,926,000
2 - Vocational Education	$ 304,048,119
3 - Transportation	$ 173,451,000
4 - Aid to Disadvantaged	$ 124,315,360
5 - Special Education	$ 314,522,676
6 - School Lunch	$ 15,666,008
7 - Administration	$ 14,353,797
8 - Basic Aid	$1,532,021,000

Source: Ohio. Facts About Ohio Finances: 1977-1979 Biennium Primary and Secondary Education. (Columbus, Ohio: Ohio Legislative Budget Office, 1977), p. 10-7.

Finally, Mr. Fichter pointed out that ninety-seven public school systems had reported operational gifted programs at the beginning of the 1978-1979 school year. Twenty-two, or 22.7 percent, of the programs had a coordinator who meets the qualifications enumerated in Program Standards for School Foundation Units for Gifted Children which was cited earlier in this chapter. A complete list of gifted programs for the 1978-1979 school year, which includes program coordinators, was compiled by the Ohio Department of Education. A copy of this list showed ninety-seven operational programs in various locations.

Dr. Wayson provided information on the status of teacher education and certification in Ohio at the time of this study. She was also very helpful in directing the writer to information on the financial aspects of higher education in Ohio and its governance. Mindful of the financial pinch on higher education--in fact, all public education--at the time of this study, the need for careful investigation and sound documentation of any certification recommendations for teachers of the gifted and talented was discussed. The major findings of this study have been forwarded to the Division of Teacher Education and Certification in the Ohio Department of Education for possible examination, consideration, and planning purposes.

Information from the U.S. Office of Education

Interviews were held with designated representatives in the Office of Gifted and Talented, U.S. Office of Education and correspondence from Dr. Dorothy Sisk, Director of the Office of Gifted and Talented, proved helpful in determining sources of information on Federal policy and Federal legislation.

Public Law 93-38, Section 404, Title IV has provided a statutory base for the gifted and talented, to wit:

> Sec. 404(a) - The Commisioner shall designate an administrative unit within the Office of Education to administer the programs and projects authorized by this section and to coordinate all programs for gifted and talented children and youth administered by the office . . .
>
> (c)(1) The Commissioner shall make grants to state educational agencies and local educational agencies, in accordance with the provisions of this subsection, in order to assist them in the planning, development, operation, and improvement of programs and projects designed to meet the special educational needs of gifted and talented children at the pre-school and elementary and secondary levels . . .
>
> (h) For the purpose of carrying out the provisions of this section the Commissioner is authorized to expend not to exceed $2,560,000 for each fiscal year ending prior to July 1, 1978 . . . (Boston, 1978)

The Gifted and Talented Children's Education Act

The Gifted and Talented Children's Education Act became law on October 15, 1978. The new act makes some important changes from Public Law 93-38 above. They are:

1. Gifted/Talented funds would come under Title IX-a.

2. Appropriation for Fiscal Year 1978 is $3.7 million.

3. Authorization for Fiscal Year 1979 is $25 million with an increase in authorization of $5 million more each year until Fiscal Year 1983 when the authorization reaches $50 million.

4. Seventy-five percent of the total appropriations would go to states if they make application.

5. If the appropriation level reaches $50 million, states would receive funds based on population. No state would receive less than $50,000 (Fox, 1978b).

It would appear from the funding efforts of several states for gifted programs that the Federal appropriation of only $3.7 million for Fiscal Year 1978 has continued to be significantly below what could be considered to be an adequate level for future growth and development at the national level.

Subjective Comments from Respondents

Subjective comments to open-ended questions from the four subgroups studied in this work were considered to be pertinent to this study. The subgroups were (1) respondents to the Ohio Public School Survey; (2) respondents to the Ohio College Survey; (3) interviewees contacted during public school visitations with coordinators, teachers, and principals working with gifted/talented programs; and (4) college faculty and administrators working in or with college programs for teachers of the gifted and talented.

Anonymity was assured in the letters of transmittal which accompanied the surveys and in the requests for interviews; consequently, comments from respondents have been identified only by a general title. Comments have been listed under the basic research questions, cited earlier in this chapter, for examination and consideration by the reader.

Comments Regarding Research Question Number One

Ohio Public School Survey:

> We have received a Title IV-C development grant from the State Department of Education to develop a program for the gifted and talented in Mathematics and Science. This program will be piloted in nine elementary schools (K-6) plus one non-public school during the 1978-1979 school year . . .
> This program will pull out primary and intermediate pupils for science and math instruction using models of instruction we are developing. These pupils meet for 45 minutes a day . . .

Ohio Public School Survey:

> Our school system believes that gifted students should remain in a heterogeneous class. They need many opportunities to have enrichment and independent study.

Ohio Public School Interview:

> We offer enrichment and independent study within as well as outside the regular classroom! The teacher meets with groups of no more than ten students at a time for an entire day. Field trips and help from community mentors are a big part of our program.

College Faculty Interview:

> I believe in a differentiated curriculum will give gifted children flexibility. Teachers need to be instructed in this and given the time to do it.

Comments Regarding Research Question Number Nine

Ohio Public School Interview:

The local T.A.G. association is very active. The Jr. League gave us a grant of $16,000 for operation of the Metropolitan Gifted Resource Center during the 1978-1979 school year. We have had an excellent response to our Saturday morning classes, good radio and TV coverage and adequate display space for the children's work in shopping malls. I know I sound like a P.R. woman most of the time, but maybe that's what our kids need.

Ohio Public School Survey:

"There has been a drive in the community to restore cuts in Major Works Program funds."

Ohio Public School Survey:

"People move to our school district for such programs."

Ohio Public School Survey:

There is an active parent organization in our area that is affiliated with the Ohio Association of Gifted Children. They work for financial support from the city schools, as mentors, and resource people.

College Administrator Interview:

The local community has a pilot project in two of their elementary schools. Several of our graduates, at the undergraduate level, have worked in the project. We also supply names of teacher trainees who are willing to work in the community mentor program.

Comments Regarding Research Question Number Ten

Ohio Public School Survey:

It is difficult, at this time, to make a decision on the need for certification. It is a matter that

should receive close consideration and the identification of the specific needs of teachers before we could decide.

Ohio Public School Survey:

Yes - if it is over and above regular certification. I do feel strongly that the teacher must have some experience in order to evaluate the group.

Ohio Public School Survey:

"A good teacher of the gifted is a rare person--with characteristics not gained by a series of courses from a university."

Ohio Public School Survey:

"Training is more important than certification."

Ohio College Survey:

"Definitely!"

Public School Interview:

As a teacher with a Master's degree in gifted education it would be easy to say yes. However, too many teachers might not be able to qualify for certification and there is already a shortage.

Ohio Public School Survey:

"No! one more bureaucratic headache."

Public School Interview:

"No--I feel all teachers should have some training in this area."

Ohio Public School Survey:

"No, never! That would be aristocratic!"

Additional Comments

Two additional categories of comments were considered to be pertinent to this study even though they answer none

of the basic research questions. They have been included because they were the subject of frequent comment. They are (1) comments regarding creativity in the gifted female compared to creativity in the gifted male and (2) comments regarding the future demand for teachers trained to work with the gifted and talented.

Comments regarding creativity in the gifted female compared to creativity in the gifted male were offered by interview respondents in reply to the question, "How do you view creativity in the gifted female as compared to the gifted male?" Selected comments are as follows:

Public School Teacher in a gifted program:

> There is a difference caused by ethnic or cultural background. My parents were German and they emphasized math and science for my brothers and writing for me.

Teacher of the Gifted:

> "Girls do better in creating rhymes for poetry and using their imagination."

Selected poems from children have been included in Appendix I on page 144.

Gifted/Talented Program Coordinator:

> "Gifted girls often hide their creativity because they don't want to be too different or appear smarter than boys."

College Faculty Member:

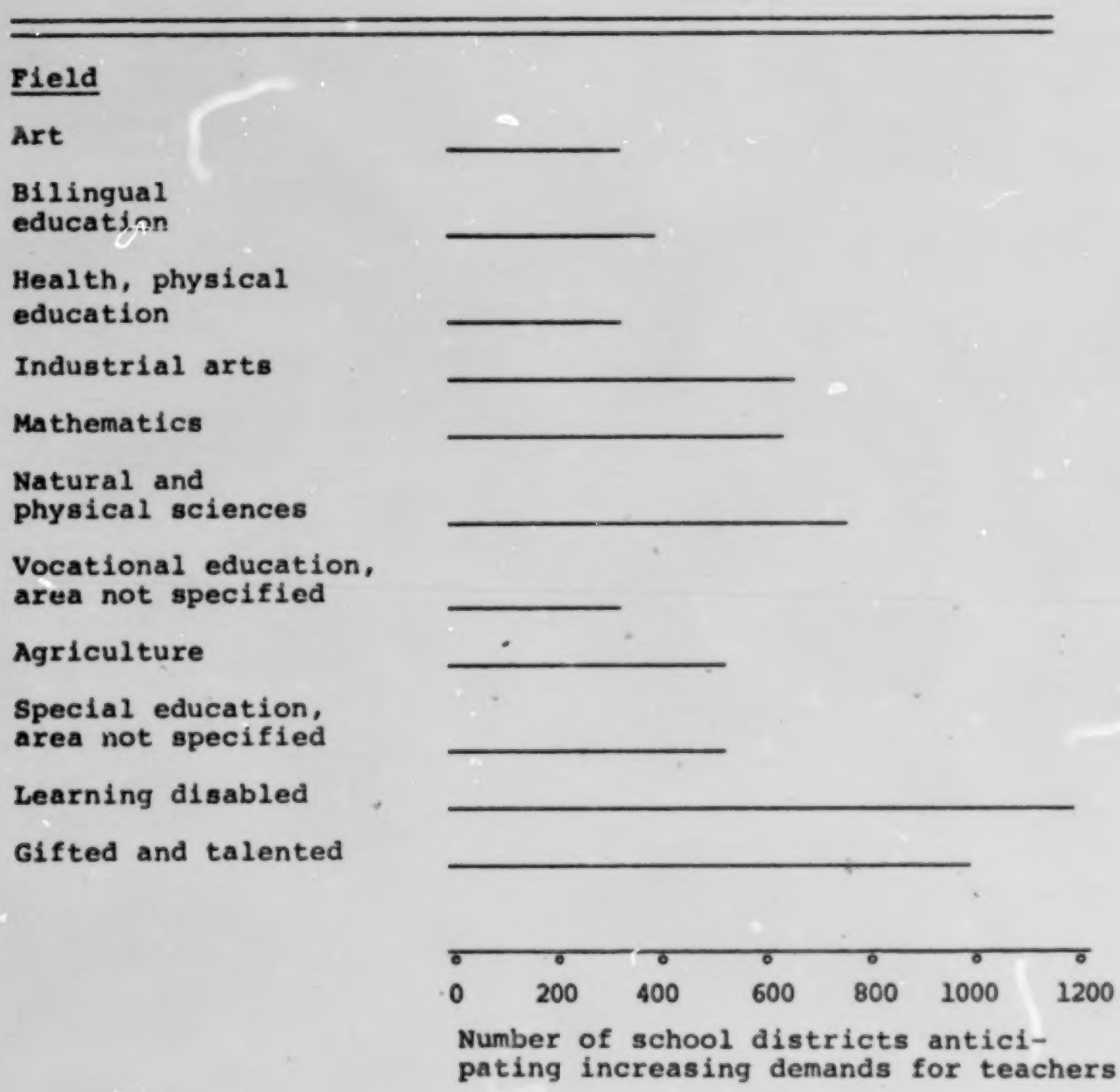
> "Females handle cognitive problems in a different way, but who knows how?"

During the course of college visitations and interviews several faculty members brought up the point that planning a course for a specific educational specialty (e.g., coursework for teachers of the gifted and talented), required sound estimates of future needs for such an educational specialty. Inquiry by the research advisor, while visiting the Department of Health, Education, and Welfare in Washington, D.C., resulted in data which were considered pertinent to this point. They are (1) school district teacher shortages and (2) fields in which the demand for teachers is expected to increase. These data have been displayed in Tables 20 and 21, respectively.

Examination of the data in Table 20 revealed that 1,000 school districts have indicated that the demand for teachers of the gifted and talented is likely to grow in the period from 1978 to 1983. Additionally, inspection of the data in Table 21 revealed that despite an overall surplus of teachers, school districts reported over 500 position openings for which qualified teachers were sought but were unavailable in the field of teaching the gifted and talented.

TABLE 20

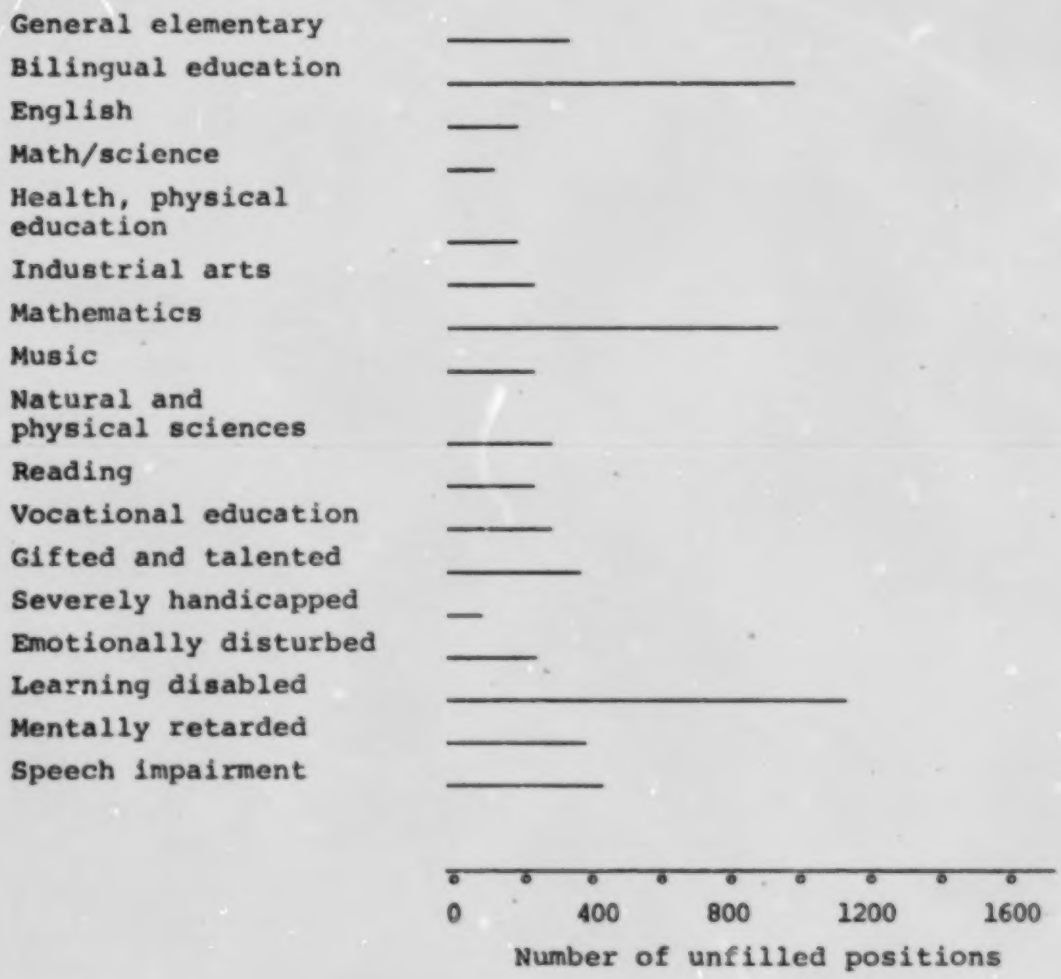
FIELDS IN WHICH DEMAND FOR TEACHERS IS EXPECTED TO INCREASE IN THE NEXT FIVE YEARS



Source: U.S. Department of Health, Education, and Welfare, National Center for Educational Statistics, LEA Survey of Teacher and Administrator Shortages, unpublished tabulations, p. 175.

TABLE 21

POSITION OPENINGS FOR WHICH TEACHERS WERE SOUGHT BUT WERE UNABLE TO BE HIRED BECAUSE QUALIFIED CANDIDATES WERE UNAVAILABLE



Source: U.S. Department of Health, Education, and Welfare, National Center for Educational Statistics, LEA Survey of Teacher and Administrator Shortages, unpublished tabulations, p. 173.

Summary

Clearly, the data reported relating to the research questions in this study points to a growing awareness by public school systems, teachers, and teacher educators of the need for a more constructively focused effort in the education of the gifted and talented in the schools of Ohio.

National data, shown in Tables 20 and 21, document this trend. Growing demands for specially trained teachers to work with the gifted and talented students have been shown to exist in national studies as well as the continued existing shortage in staff available for employment in 1978.

Chapter Five has summarized the findings of this investigation, set down conclusions based on the research question data, and finally, listed recommendations found to be important to the future growth and development of training programs for teachers of the gifted and talented in the elementary schools of Ohio.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This investigation has identified and studied the essential elements in the training of teachers of the gifted and talented and other associated factors as they related to the public schools and teacher education institutions in Ohio.

The major research focus of this investigation was on three objectives. They were (1) to collect, analyze, and report on data related to programs for the gifted and talented in the elementary schools of Ohio, (2) to collect, analyze, and report on data related to training programs for teachers of the gifted and talented in Ohio, and (3) to analyze this data and draw sound conclusions, implications, and recommendations which may hopefully lead to the improvement of training programs for teachers specializing in the area of gifted and talented education.

To accomplish the three objectives, a six-stage study was initiated. The study was organized as follows: (1) all public school systems in Ohio and the fifty-one colleges approved for teacher education were surveyed;

(2) six Ohio public school systems and six Ohio colleges approved for teacher education were studied through visitations and interviews; (3) informal meetings were held with representatives of the Ohio Department of Education; (4) interviews were conducted with a representative of the Office of Gifted and Talented in the U.S. Office of Education, and subsequent follow-up correspondence was exchanged with the office; (5) data was organized, treated, displayed, analyzed, and reported on; and (6) based upon the information reported on in this study, recommendations to meet the training needs of teachers of the gifted and talented students in the elementary schools of Ohio, were submitted.

Chapter One established the parameters of the investigation by detailing background information, describing the nature of the problems associated with the training of teachers of the gifted and talented, the purpose of the research, and other associated components.

Chapter Two reviewed four bodies of scholarly literature related to the training of teachers of the gifted and talented, (i.e., an historical overview of the gifted child movement, studies regarding the findings about the characteristics of teachers of the gifted and talented, pertinent literature related to the preservice and inservice

training available to teachers of the gifted and talented, and current practices and methodologies in the identification of the gifted and talented).

The third chapter of this investigation identified and described the methodology and research design followed in this descriptive study of the training needs of teachers of the gifted and talented in the elementary schools of Ohio. The chapter included sections on research design, the study population, instrumentation of the study, and data limitations and interpretations.

Chapter Four described and displayed in tabular and figural form the major findings of the investigation. These data were examined through the use of percent-of-response treatments, Chi-Square analyses, and by comparing the responses of Ohio public school systems, Ohio teacher colleges, and teachers of the gifted and talented.

Conclusions

The findings of this investigation have been reported, in Chapter Four, with respect to the ten research questions posed earlier for consideration in this investigation. Conclusions based upon the evidence furnished by the findings have been listed under research question headings for ease of comparison with findings.

Research Question Number One

Although interest in the gifted and talented was shown to be significantly high at both the national and state levels, only thirty-eight percent of the respondents to the Ohio Public School Survey reported an operational gifted/talented program in their public school system. Three major classifications of programs and learning experiences were reported. They were (1) acceleration, (2) homogeneous grouping, and (3) enrichment programs. Many variations were reported in each category and, in fact, many programs involved all three types. The programs are similar in that each assumes that some kind of differentiated instruction was necessary for the gifted and talented children in the programs.

Research Question Number Two

Eighty-one percent of the responding Ohio public school systems reported a coordinator for their gifted/talented program. However, examination of the titles reported for these coordinators proved that a majority of them were not specifically trained for the position and that they devoted only a portion of their time to it. This observation was confirmed by data obtained from the Ohio Department of Education which showed that only twenty-nine

percent of these coordinators met the qualifications established by the Ohio Department of Education for gifted/talented program funding. There appeared to be a critical shortage of educators who have been trained and who qualify in terms of Ohio Department of Education standards for the position of gifted/talented program coordinator. This shortage was considered serious because the person who serves as coordinator has, according to state standards, the primary responsibility for implementing staff development programs for school personnel as well as a host of other functions related to the conduct of the gifted/talented program.

Research Question Number Three

Responding school systems' method(s) of identifying a given student for placement in a gifted/talent program varied. Data obtained tended to show a high reliance being placed on the use of standardized tests, student achievement, and teacher nominations as identification methods. The literature review indicated that these methods alone are somewhat less than adequate. School systems would be well advised to explore some of the limitations of these methods as reported by Bruch, 1971, 1975; Gear, 1976, 1978; Jacobs, 1971; and Khatena, 1978.

A number of the school systems studied through visitation and interview (e.g., Columbus and Toledo) have utilized a case study approach based on analysis of data listed on a screening or identification instrument. Studies reported by other investigators (Renzulli and Smith, 1977; and Jackson and Robinson, 1977) recommended this as an effective method of identifying and placing gifted and talented students in the appropriate program.

Research Question Number Four

Three different responding subgroups reported three different orders of preference for different types of inservice and preservice training for teachers of the gifted and talented. Teachers of the gifted and talented placed the importance of inservice training first, Ohio public school system respondents ordered graduate-level courses first, and Ohio teacher colleges ordered training in yet another way with undergraduate-level courses listed first. These findings strongly suggest that a need exists for improved articulation between teachers of the gifted and talented, the school systems they work in, and Ohio colleges approved for teacher education with regard to teacher training needs.

Research Question Number Five

Teachers of the gifted and talented, Ohio public school systems, and teacher education colleges all reported creativity as the most desirable characteristic for a teacher of the gifted and talented. Beyond that there were no unanimous agreements on other critical variables in identifying desirable characteristics of a teacher for the gifted and talented, but the findings of this study as well as information reported in the literature suggests the use of the following characteristics as ones a teacher should possess before entering college or acquire during training: creativity, flexibility, high energy level, understanding of individual student needs, ability to challenge students, and personal self-concept positive enough to be challenged by them, possess a good sense of humor, and desire to work with the gifted.

Comprehensive programs of preservice or inservice training could effectively improve many of the characteristics above, but it appears that training alone can not prepare a teacher to work effectively with gifted and talented students unless the teacher first possess these characteristics. Training programs, it appears, are of greater value in developing the specific thinking and interaction skills mentioned in the gifted course descriptions listed in the Appendix G on pages 149 to 154.

Research Questions Number Six and Seven

Data pertinent to these two questions were combined in Chapter Four. The Chi-Square tests applied to data regarding these questions showed a statistically significant difference in the level of cooperative-inservice involvement between Ohio public school systems and Ohio teacher education colleges. These findings suggest, as did those findings in regard to question number four, that a need has existed in the area of improvement in articulation of priorities and goals between Ohio public school systems and Ohio teacher education colleges regarding the need for inservice training programs for teachers of the gifted and talented.

Research Question Number Eight

The findings reported in Table eight and under college visitations and interviews showed that while individual faculty members from a few Ohio colleges have taken an active part in the training of teachers who will work with the gifted and talented, for the most part, Ohio institutions offering teacher education courses have not been active in training teachers to work with gifted and talented students, nor have they offered the graduate-level work required to produce specialists who could assume leadership positions. As in the case with many college-level special

education programs, it may be necessary for federal and state authorities to take the initiative in legislative and funding activities to help teacher education colleges expand their gifted course offerings.

Research Question Number Nine

The Chi-Square tests applied to the data regarding this question clearly indicated that significantly more community interest in gifted and talented programs has been evidenced in college communities reported on in the Ohio College Survey than in those communities reported on by the Ohio Public School Survey respondents. Based on these findings one must assume that more effort needs to be made in systematically informing the general public of the availability of specific programs, training experiences, and screening procedures which exist, and the implications they have for establishing comprehensive programs for the gifted and talented children who must surely be found in every community.

Research Question Number Ten

The question of certification of teachers of the gifted and talented in Ohio is a critically important consideration since certification implies a wide range of supplementary considerations such as higher levels of state

and local funding, the establishment of state standards, comprehensive and empirically based curriculum development and program planning, improved local supervision--and most importantly--special assistance for more of the gifted and talented youth of Ohio. Most certainly the central concern of this investigation has been the improvement of those teacher education programs and inserivce offerings which would lead to maximization of the learning potential of these youth.

Since establishment by the Ohio Department of Education in 1972, certification in special education strengthened educational services for various categories of special education programs. As early as 1975, gifted programs were established in Ohio. Most certainly, it is an opportune time for the Ohio Department of Education to carefully consider the benefits to the gifted inherent in certification of teachers of the gifted and talented.

Recommendations

Based upon the information collected in this research investigation, as well as readings related to the subject, recommendations to improve the training available to teachers of the gifted and talented have been submitted. Recommendations are directed to readers at the local, state, and federal level. Specific recommendations for each level have been submitted.

Local Level

1. Each Ohio public school system should conduct a school-community needs assessment to determine the desired and actual status of gifted/talented programs in the community.

2. Each Ohio public school system should thoroughly investigate the need for and benefits of a qualified coordinator for any gifted/talented program that they might consider.

3. Each Ohio public school system with an operational gifted/talented program should consider the benefits of a case study approach to identification.

4. Cooperative articulation between school systems and teacher educators, concerning the training needs of teachers of the gifted and talented, needs to be increased.

5. While researchers continue in their attempts to define what good teachers do, the public schools and teacher educators in Ohio need to seek more agrement on the desirable characteristics that a teacher of the gifted and talented should possess before entering training or acquire during training.

6. Ohio colleges approved for teacher education should explore ways to increase involvement in cooperative-inservice training programs with Ohio public school systems.

7. Ohio colleges approved for teacher education which are located in a community evidencing a high interest in gifted/talented programs should consider the benefits of maximizing their cooperative involvement in these programs.

State Level

1. The Ohio Department of Education may need to conduct a needs assessment to determine if the graduate-level degree programs concerned with gifted education should be made available through additional educational institutions to teachers in a wider geographic area of Ohio.

2. The Ohio laws and regulations governing teacher education and certification regarding a special education teaching certificate should be reviewed to decide the advisability of including teachers of the gifted and talented in these regulations.

3. State funding for the office of consultant for gifted programs in the Ohio Department of Education may need to be increased if the number of gifted/talented programs continues to grow.

4. The Ohio Supervisory Network, Programs for Gifted and Talented, should be increased from the twenty-two members shown in the Appendices, pages 133 to 135, to include the ninety-seven gifted/talented programs recognized by the Ohio Department of Education.

5. Adequate funding is a necessary prerequisite to an improved educational program for the gifted and talented students of Ohio. Longitudinal studies which demonstrate program competence may be needed to convince the Ohio Legislature of the wisdom inherent in increased funding for gifted/talented programs. In the interim, the Ohio Department of Education's legislative recommendation of $2.4 million for Ohio gifted programs during the 1980-1982 Biennium is certainly a reasonable one when compared with gifted program funding in similarly wealthy states.

Federal Level

1. Other states interested in gaining a better insight into their training needs for teachers of the gifted and talented might consider a replication of this study. The U.S. Office of Education may wish to consider synthesizing and disseminating the results of any such studies.

2. The literature review indicated that giftedness is often defined, and consequently identified, in masculine terms which are also seldom culturally fair. It would be advisable for federal and local agencies to carefully study the educational needs of the gifted female and the disadvantaged gifted.

3. At the time of this writing, the funding of education in Ohio, as well as numerous other states, was a crucial issue. Consequently, it would be advisable for the U.S. Congress to fully appropriate the $25 million authorized by the Gifted and Talented Children's Education Act of 1978 in light of the Act's provision that seventy-five percent of the appropriation will go to the fifty states.

Summation

Through research including two surveys, interviews, visitations, correspondence, and personal observations, the findings which have emerged from this study have identified numerous training needs for teachers of the gifted and talented in the elementary schools of Ohio. Recommendations for program improvement at the local, state, and federal levels have been submitted.

The gifted and talented youth of our nation are an invaluable human resource. Their educational and personal nurture should be one of the highest priorities held by educations, legislators, and parents. This study has shown that a considerable amount of additional effort must be expended in order to improve upon present conditions and educational opportunities that are imperatives in the successful operation of this or any educational endeavor.

Finally, the love and sense of mission so evident in teachers of the gifted and talented must somehow get back into every classroom. Without this, our gifted children--in fact, all children--will seldom reach the potentials that they, and our nation, so richly deserve.

APPENDICES

APPENDIX A

Survey Instruments

APPENDIX A

To: The Head of the Education Department:

Your answers will aid in determining the training needs of teachers for the gifted/talented children in elementary schools.

	Yes	No
1. Do you offer coursework for teachers of the gifted/talented child?	___	___
If yes, number of years offered? _____		
2. If the answer to question one is yes, what course(s)?		
Undergraduate level _____		
_____		
Graduate level _____		
_____		
_____		
Doctoral level _____		
_____		
_____		
Practicum-level(s) _____		
3. If you offer a course on the Exceptional Child, does it include information on the gifted/talented child?	___	___
4. If the question in number one was answered no, do you plan a course in the near future?		
If yes, course name? _____	___	___
	Check desired	
5. Training options for teachers of the gifted/talented		
a. undergraduate level courses	_____	
b. graduate level courses	_____	
c. in-service training-How often? _____	_____	
d. other _____		
_____		
6. Please list the desirable characteristics of teachers for the gifted/talented child _____		
_____		
_____		
	Yes	No
7. Do you offer in-service training in cooperation with public schools? If yes, what type? _____	___	___
_____		
_____		
8. Please list any evidence of community interest in programs for the gifted/talented _____		
_____		
_____		
9. Are you in favor of future Ohio Certification for teachers of the gifted/talented child?	___	___

Please use the back of this questionnaire for other comments.

Signed _____ Title _____ College _____

TO: Superintendents of Schools in Ohio:

Your answers will aid in determining the training needs of teachers for the gifted/talented children in elementary schools.

		Yes	No
1.	Does your system have a gifted/talented program? If yes, number of years in operation? _____	___	___
2.	What type of program(s) do you offer?	Please check	
	a. enrichment within the regular classroom	_____	
	b. grouping in a homogenous class	_____	
	c. acceleration in grade level	_____	
	d. other _____	_____	
3.	Is there a designated coordinator for the program? If yes, name _____ title _____	Yes ___	No ___
4.	If the answer to question one is no, do you have plans for a program in the near future? If yes, what type of program do you plan? _____ _____	___	___
5.	Training options for teachers of the gifted/talented	Check desired	
	a. undergraduate level courses	_____	
	b. graduate level courses	_____	
	c. in-service training - How often? _____	_____	
	d. other _____	_____	
6.	Please list the desirable characteristics of teachers for the gifted/talented _____ _____ _____		
7.	Do you provide in-service training in cooperation with a college? If yes, college? _____ Type? _____ _____	Yes ___	No ___
8.	Criteria you use to identify the gifted/talented	Please check	
	a. teacher judgement	_____	
	b. group intelligence test, name? _____	_____	
	c. individual intelligence test, name? _____	_____	
	d. other _____	_____	
9.	Please list any evidence of community interest in programs for the gifted/talented _____ _____		
10.	Are you in favor of future Ohio Certification for teachers of the gifted/talented child?	Yes ___	No ___

Please use the back of this questionnaire for additional ideas.

Signed _____ Title _____ System _____

APPENDIX B

Letters of Transmittal

Columbus, Oh
October 14, 1978

Dear Ohio Educator:

Your school system has been selected to participate in a survey which will aid in determining the training needs of teachers for the gifted and talented children in the elementary schools of Ohio. The information received from this survey will result in a proposal for the further development of training programs for teachers of gifted and talented children.

It may be of interest to you to know that 115 other school systems in Ohio are being asked to fill out the same questionnaire in order that a comprehensive picture of the training needs of teachers for the gifted and talented child might be secured. This accumulated data will be of significant value because it will give positive direction to a proposed plan which, hopefully, will help these teachers to improve the specific thinking and interaction skills required for teaching these special children.

I would like to assure you of my personal appreciation for your careful and prompt completion of this short questionnaire, and of the confidentiality of your answers. Your cooperation will help me to complete a dissertation entitled "Training Needs of Teachers for the Gifted and Talented in the Elementary Schools of Ohio." May I suggest that the person responsible for your gifted and talented program fill out this questionnaire.

Sincerely yours,

Ronald S. Turrell

Ronald S. Turrell
Teacher
Columbus Public Schools

Dear Ohio Educator:

As a teacher educator, I am in full accord with this study which is being made by Mr. Turrell as being one that can be useful in determining the training needs of teachers for the gifted and talented children in the elementary schools of Ohio. I would like to encourage your participation in this research project.

Thanking you,

John A. Kirker

John A. Kirker, Ph.D.
Chairman
Education Department
Capital University

Columbus, Ohio
October 14, 1978

Dear Teacher Educator:

Your college has been selected to participate in a survey which will aid in determining the training needs of teachers for the gifted and talented children in the elementary schools of Ohio. The information received from this survey will result in a proposed plan for the further development of training programs for teachers of gifted and talented children throughout Ohio.

It may be of interest to you to know that the fifty-one other institutions in Ohio approved for teacher education are being asked to fill out the same questionnaire in order that a comprehensive picture of the training needs of teachers for the gifted and talented child might be secured. This accumulated data will be of significant value because it will give positive direction to a proposed plan which, hopefully, will help these teachers to improve the specific thinking and interaction skills required for teaching these special children.

I would like to assure you of my personal appreciation for your careful and prompt completion of this short questionnaire, and of the confidentiality of your answers. Your cooperation will help me to complete a dissertation entitled "Training Needs of Teachers for the Gifted and Talented in the Elementary Schools of Ohio." May I suggest that the person most familiar with your gifted and talented courses fill out this questionnaire.

Sincerely yours,
Ronald S. Turrell
Ronald S. Turrell
Teacher
Columbus Public Schools

Dear Colleague:

As a teacher educator, I am in full accord with this study which is being made by Mr. Turrell as being one that can be useful in determining the training needs of teachers for the gifted and talented children in the elementary schools of Ohio. I would like to encourage your participation in this research project.

Thanking you,
John A. Kirker
John A. Kirker, Ph.D.
Chairman, Education Department
Capital University

APPENDIX C

Interview Checklists

APPENDIX C

Public School Interview Checklist

To: Teachers of Gifted and Talented Children

Your answers will aid in determining the training needs of teachers for the gifted/talented children in elementary schools.

1. Name of teacher _____
   Educational background:
   College:
   Degree:
   Present teaching assignment:
   School: Grade:
   Number in class:
   Gifted/talented: Other:

2. What type of program(s) do you favor? please check

   a. enrichment within the regular classroom ___
   b. grouping in homogeneous classes ___
   c. acceleration in grade level ___
   d. other _____ ___

3. Have you taken any coursework or inservice training on gifted/talented children? If yes, please specify type and where taken. yes no

   _____

   _____

4. Based upon your teaching experience, what course(s) or inservice training do you consider to be most helpful in guiding and teaching the gifted child?

   _____

   _____

5. Teacher training options

   a. undergraduate level--gifted/talented courses please check ___
   b. graduate level--gifted/talented courses ___
   c. periodic inservice training ___
   d. other _____ ___

6. Please list desirable characteristics for teachers of the gifted/talented child _____

   _____

   _____

7. What criteria do you favor for identification of gifted/talented children? please check

   a. teacher judgment
   b. group intelligence test(s), name(s) ___
   c. individual intelligence test(s), name(s) ___

Please list any suggestions for the improvement of training for teachers of the gifted/talented child on the reverse side of this checklist.

College Interview Checklist

To: Faculty working with teachers of the gifted/talented

1. Name of faculty member _____
   Educational background:
   College:
   Degree:

2. Please list the teacher preparation course(s) and/or inservice training that you teach:

   _____
   _____
   _____
   _____
   _____

(You may include a copy of the college catalogue page(s) describing the courses to save writing.)

3. Based upon your experience, what course(s) and/or inservice training do you consider to be the minimum required for a teacher of the gifted and talented?

   _____
   _____
   _____
   _____

4. Training options for teachers of the gifted/talented.

	please check
a. include information on the gifted and talented child in a course on the exceptional child	___
b. undergraduate-level course(s) on the gifted and talented	___
c. graduate level-course(s) on the gifted and talented	___
d. doctoral-level course(s) on the gifted and talented	___
e. practicum level(s) _____	___
f. other _____	___

5. Are you in favor of future Ohio certification for teachers of the gifted/talented child? yes ( ) no ( ) If yes, by:
   coursework ___
   validation ___
   other ___

Please list any suggestions for the improvement of training for teachers of the gifted/talented child on the reverse side of this checklist.

APPENDIX D

Identification Instruments and Tests

APPENDIX D

For Office Use ☐

COLUMBUS PUBLIC SCHOOLS
SCREENING INSTRUMENT FOR GIFTED AND TALENTED STUDENTS
GRADES K-7

STUDENT _____ STUDENT NUMBER _____ BIRTH DATE _____
ADDRESS _____ ZIP _____ PARENT(S) NAME _____
TELEPHONE _____
SCHOOL _____ GRADE _____
PERSON NOMINATING _____ TITLE _____
DATE _____ PRINCIPAL'S SIGNATURE _____

INSTRUCTIONS: This instrument is used to assess the qualifications of students for the Gifted and Talented Program. Please supply the requested information, complete the checklists and total the scores.

I - TEST DATA

(Obtained from the Columbus Test Profile or other appropriate sources)

TEST	STANINE SCORE	CREDITS	POINTS
Any short form test of academic aptitude	Any part touching 9 stanine	10	____
Any reading achievement test	Completely in the 7, 8, or 9 stanine	5	____
Any arithmetic achievement test	Completely in the 7, 8, or 9 stanine	5	____

II - PERFORMANCE DATA

Gifted and Talented students are often quite difficult to identify. Some will not score well on a standardized test; however, there is general agreement that the following characteristics and/or behaviors are exhibited by this type of learner. Assign points according to the scale below.

(3) Almost Always (2) Sometimes (1) Rarely (0) Never

LEARNING RATE:	Learns rapidly and easily	____
REASONING ABILITY:	Reasons things out; thinks clearly; recognizes relationships	____
MEMORY:	Retains what is heard or said without too much rote or drill	____
PERSONAL KNOWLEDGE:	Knows about many things of which other children are unaware	____
VOCABULARY:	Has a large vocabulary; uses it easily and accurately	____
INTEREST LEVEL:	Asks many questions; has a broad range of interests	____
OBSERVATION SKILLS:	Is keenly aware of the physical and social environment	____
SELF DIRECTION:	Is persistent in seeking task completion	____
PROBLEM SOLVING:	Offers many unique and clever solutions to problems	____
COMMON SENSE:	Uses a great deal of practical knowledge	____
INTELLECTUAL CURIOSITY:	Displays intellectual playfulness; has a keen sense of humor	____
SOCIAL ADAPTIVITY:	Is socially skillful with adults and peers	____
	TOTAL POINTS	____

Please add any information, including individual intelligence test scores, or comments that will assist in the understanding of the student. (Use reverse side if needed)

_____

_____

_____

Note: Parents may request a meeting with the principal and a person from the Gifted and Talented office if they wish their child/children to be considered for inclusion in the Program.

PLEASE RETURN TO THE GIFTED AND TALENTED OFFICE, SIXTH AVENUE INSTRUCTIONAL CENTER.

Rev. 1978

Approved: Evelyn Luckey

APPENDIX D (continued)

IDENTIFICATION INSTRUMENT
TOLEDO PUBLIC SCHOOLS/1/1/79

I.D. NUMBER _____ Student Name _____

Date _____ Grade _____ School _____

Age _____ Birthdate _____ Sex _____

Teacher _____ Evaluator _____

ASSESSMENT ITEMS	SCORES					
	5	4	3	2	1	8-NA
Standard Intelligence Test	140+ ( )	130-139 ( )	120-129 ( )	110-119 ( )	100-109 ( )	( )
Achievement Test Scores - Reading	_____ ( )	_____ ( )	_____ ( )	_____ ( )	Median for School ( )	( )
Achievement Test Scores - Math	_____ ( )	_____ ( )	_____ ( )	_____ ( )	Median for School ( )	( )
Learning Scale Score	40-45 ( )	35-39 ( )	30-34 ( )	25-29 ( )	20-25 ( )	( )
Motivational Scale Score	20 ( )	17-19 ( )	14-16 ( )	11-13 ( )	8-10 ( )	( )
Creativity Scale Score	23-25 ( )	20- 22 ( )	17-19 ( )	14-16 ( )	11-13 ( )	( )
Leadership Scale Score	32-35 ( )	28-31 ( )	24-27 ( )	20-23 ( )	16-19 ( )	( )
Teacher Recommendation	Without Reservation ( )	Yes ( )	Perhaps ( )	Questionable ( )	No ( )	( )
Participation in Mixed Grade	N/A -----	N/A -----	3 yrs+ ( )	2 yrs. ( )	1 yr. ( )	( )
Other _____	( )	( )	( )	( )	( )	( )
COLUMN TALLY /CHECKS						
WEIGHT	x5	x4	x3	x2	x1	
ADD ACROSS						

ML/11/15/78

TOTAL SCORE _____

APPENDIX D (continued)

Guilford's Structure of the Intellect

The three components of Guilford's Model include:

OPERATION:

- Evaluation
- Convergent production
- Divergent production
- Memory
- Cognition

PRODUCT:

- Units
- Classes
- Relations
- Systems
- Transformations
- Implications

CONTENT:

- Figural
- Symbolic
- Behavioral

The structure of Guilford's model is a three-dimensional cube consisting of intellectual "operations," "products," and "content." Guilford used the statistical technique of factor analysis to generate 120 possible cognitive abilities (Gallagher, 1975).

APPENDIX D (continued)

Cognitive Tests for Measuring Thinking

I. Convergent Thinking
   A. Achievement Tests
      - California Test of Basic Skills (grades 1-8)
      - Iowa Tests of Basic Skills
      - Metropolitan Achievement Test (grades 1-12)
      - SRA Achievement Tests (grades 1-9)
      - Stanford Achievement Tests (grades 1-9)
      - Cognitive Abilities Tests (grades K-8)

   B. Intelligence Tests
      - Stanford-Binet Intelligence Scale (grades K-12)
      - Wechsler Intelligence Scale for Children (WISC) (age 5-15)
      - Wechsler Adult Intelligence Scale (age 16)
      - Peabody Picture Vocabulary Test (grades K-12)
      - California Tests of Mental Maturity (grades 4-12)
      - Wechsler Adult Intelligence Scale (WAIS) (age 16+)

II. Divergent Thinking
   A. Creativity Tests
      - Torrance Tests of Creative Thinking--Verbal (grades 4-12)
      - Torrance Tests of Creative Thinking--Figural (grades 1-12)
      - Guilford's Test of Creativity--Verbal, Figural (grades 7-12)

Affective Tests for Measuring Feeling

I. Convergent Tests
   A. Character and Personality
      - Early School Personality Questionnaire (grades 1-3)
      - Children's Personality Questionnaire (grades 6-12)
      - Junior-Senior High Personality Questionnaire (grades 6-12)
      - California Test of Personality (grades K-12)
      - Piers-Harris Self Observation Scale

   B. Self Concept
      - "How Do You Really Feel About Yourself" Inventory (grades 4-12)
      - Tennessee Self-Concept Scale (grades 5-12)
      - Self Concept as a Learner - Elementary Scale (grades 3-12)
        Secondary Scale (grades 7-12)
      - California Test of Psychology (grades K-12)

II. Divergent Tests
      - Barron-Welsh Art Scale of the Welsh Figure Preference Test (grades 1-12)
      - Personality Rating Scale (grades K-12)
      - Preschool Academic Sentiment Scale (grades K-1)

APPENDIX E

Gifted/Talented Programs

APPENDIX E

Gifted/Talented Program

Bexley City Schools, Bexley, Ohio

The Bexley City School Gifted/Talented Program has been described as follows:

Number of years in operation: two years

Type of programs offered:

- enrichment
- grouping in a homogeneous class
- acceleration in grade level

Coordinator: Mr. Curtis C. Smith, Principal

Desirable training for teachers of the gifted and talented:

- undergraduate-level courses
- graduate-level courses
- inservice training

Inservice training in cooperation with a college: none

Criteria used to identify the gifted and talented:

- teacher judgment
- group tests CATBS

Undecided on future Ohio certification for teachers of the gifted and talented

Unique features: The Bexley City Schools are planning an integrated K-12 Gifted/Talented Program.

Program offering: At the time of this writing the Bexley Gifted/Talented Program was offered in one elementary school for second through sixth-grade students. Classes are small, with no more than ten gifted and fifteen regular students.

APPENDIX E (continued)

Gifted/Talented Program

Columbus Public Schools, Columbus, Ohio

The Columbus Public Schools Gifted/Talented Program has been described as follows:

Number of years in operation: five

Type of programs offered:

- enrichment in the regular class
- acceleration in grade level

Coordinator: Ms. Jeanne Hilson

Desirable training for teachers of the gifted and talented:

- undergraduate-level courses
- graduate-level courses
- inservice training each month

Inservice training in cooperation with The Ohio State University and the state (Ohio) Department of Education

Criteria used to identify gifted/talented:

- group tests
- individual tests
- screening instrument
- parent, teacher, and principals decide

In favor of Ohio certification for teachers of the gifted and talented.

Unique features:

- monthly inservice training
- resource teachers
- cooperative internship program with OSU
- Title IV pilot program

Program offerings: At the time of this writing the Columbus Public Schools' Gifted/Talented Program was operational in eleven elementary schools. The program served 170 children and employed twenty-four teachers.

APPENDIX E (continued)

Gifted/Talented Program

Delaware City Schools

The Delaware City Schools' Gifted/Talented Program has been described as follows:

Type of program offered: enrichment within the regular class

Coordinator: Dr. Carolyn Flemming

Desirable training for teachers of the gifted and talented:

- graduate-level courses
- frequent inservice training

Inservice training in cooperation with The Ohio State University and workshops through the School Study Council of Ohio

Criteria used to identify the gifted and talented: the case study method is used with input from present and former teachers, counselors, and administrators. Also, individual achievement, and ability test scores are considered.

This school system is not in favor of Ohio certification for teachers of the gifted and talented.

Unique features:

- gifted children are in regular classes on a cluster basis of eight gifted and twelve regular students
- weekly bus trips to Columbus for work at the Columbus Art College, Columbus Symphony, and study in The Ohio State University's Adventures for Able Learners Program

Program offerings: offered to all city school elementary students who are approved. Includes about 120 students in six different elementary schools. The program is in its third year.

APPENDIX E (continued)

Gifted/Talented Program

Marion City Schools

The Marion City Schools' Gifted/Talented Program has been described as follows:

Number of years in operation: two

Type of programs offered:

grouping in a homogeneous class two half-days each week

Coordinator: Ms. JoAnne Radwin, teacher-coordinator

Desirable training for teachers of the gifted and talented:

- undergraduate-level courses
- graduate-level courses
- inservice training twice each year

Inservice training was not provided at the time of this writing.

Criteria used to identify the gifted and talented:

- group tests
- teacher judgment
- reading and math achievement scores

In favor of Ohio certification for teachers of the gifted and talented.

Unique features: Foreign languages including Spanish, Russian, German, French, and Hebrew

Program Offerings: offered to all elementary children who are selected by the screening committee. Offered in two neighborhood elementary schools, George Washington and Colonial Acres one morning and one afternoon each.

APPENDIX E (continued)

Gifted/Talented Program

Pickerington City Schools

Number of years in operation: one

Type of programs offered: enrichment in the regular class, plus children in the program are taken out of their regular class one entire day, once each week.

Coordinator: Dr. Bernard Cellar, teacher-coordinator

Desirable training for teachers of the gifted and talented:

- undergraduate-level courses
- graduate-level courses
- inservice training
- mentor workshops

Inservice is provided in cooperation with [illegible]iversity, Capital University, and The Ohio State University.

Criteria used to identify the gifted and talented:

- teacher judgment
- group tests
- individual tests
- administrator referral
- parent anecdotes

In favor of Ohio certification for teachers of the gifted and talented.

Unique feature: extensive natural science program

Program offering: offered to all elementary children who are selected by the screening committee.

APPENDIX E (continued)

Gifted/Talented Program

Toledo City Schools

The Toledo City Schools' Gifted/Talented Program has been described as follows:

Number of years in operation: six

Type of programs offered:

- grouping in a homogeneous class
- acceleration in grade level
- a separate school for the gifted is planned for the 1979-1980 school year

Coordinator: Ms. Nanci Lucas

Desirable training for teachers of the gifted and talented:

- undergraduate-level courses
- graduate-level courses
- inservice training six times/year
- Saturday morning mentor training

Inservice training is provided in cooperation with the University of Toledo six to eight times per year.

Criteria used to identify the gifted and talented:

- teacher judgment
- group tests
- individual tests
- identification matrix
- parent referral

In favor of Ohio certification for teachers of the gifted and talented.

Unique features: (1) cooperate in conjunction with the Junior League of Toledo and parents in staffing the Metropolitan Center for the Gifted, (2) extensive TV and radio coverage of the gifted and talented children's work, (3) three full-time resource teachers, (4) 1978-1979 school year grant for extensive individual intelligence testing, (5) identification of the disadvantaged was considered and built into the Toledo Identification Matrix.

Toledo City Schools (continued)

Program offerings: program is offered to over 1100 children served by twenty-three schools. Class sizes are usually twenty or less.

APPENDIX F

Ohio Supervisory Network
Gifted and Talented Programs

APPENDIX F

STATE OF OHIO

DEPARTMENT OF EDUCATION

COLUMBUS

43215

FRANKLIN B. WALTER
SUPERINTENDENT OF PUBLIC INSTRUCTION

B. J. BONHAM, Jr.
DIVISION OF SPECIAL EDUCATION
933 High Street
Worthington, Ohio 43085
466-2650

CITY AND COUNTY

SUPERVISORY NETWORK

PROGRAMS FOR GIFTED AND TALENTED

August, 1978

Ms. Joanne Barrere
Programs for Gifted and Talented
Upper Arlington School District
Tremont School
2900 Tremont Road
Columbus, Ohio 43221
(614) 481-8301

Mr. John Beard, Coordinator
Programs for Gifted and Talented
Trumbull County Schools
120 High
P. O. Box 1310
Warren, Ohio 44482
(216) 395-9581

Mr. Robert Blanchard, Coordinator
Programs for Gifted and Talented
Wayne County Schools
428 W. Liberty Street
Wooster, Ohio 44691
(216) 264-1951

Ms. Naomi Cook, Coordinator
Programs for Gifted and Talented
Steubenville City Schools
932 N. 5th Street
Steubenville, Ohio 43952
(614) 283-3767

Dr. James Davidson, Coordinator
Programs for Gifted and Talented
Wood County Schools
County Building
Court House Square
Bowling Green, Ohio 43402
(419) 352-6531

Mr. Malcolm Driver, Coordinator
Programs for Gifted and Talented
Lorain County Schools
420 West Third Street
Elyria, Ohio 44035
(216) 323-7518

Dr. Carolyn Fleming, Coordinator
Programs for Gifted and Talented
Delaware City Schools
248 North Washington Street
Delaware, Ohio 43015
(614) 363-1189

Dr. Dennis Hern, Coordinator
Programs for Gifted and Talented
Warren County Schools
P. O. Box 148
Lebanon, Ohio 45038
(513) 932-3851

Mrs. Jeanne Hilson, Coordinator
Programs for Gifted and Talented
Columbus City Schools
Alum Crest Instructional Center
2200 Winslow Drive
Columbus, Ohio 43207, (614) 445-8213

Coordinator
Programs for Gifted and Talented
East Shore Center
Lake County National Bank Building
8870 Mentor Avenue
Mentor, Ohio 44060
(216) 255-3679, 6016,8454

Dr. Charles Jordan, Director
Major Work Program
Cleveland City Schools
1380 East Sixth Street
Cleveland, Ohio 44114
(216) 696-2929

Mr. Dave Kowalka, Coordinator
Programs for Gifted and Talented
Ashland City Schools
P. O. Box 156
Ashland, Ohio 44805
(419) 289-1117

Ms. Nancy Lucas, Coordinator
Programs for Gifted and Talented
Toledo City Schools
Manhattan and Elm Streets
Toledo, Ohio 43608
(419) 729-5111

Ms. Sara Jane Lowe, Coordinator
Programs for Gifted and Talented
Montgomery County Schools
451 West Third Street
Dayton, Ohio 45422
(513) 225-4598

Ms. Susan Friend, Coordinator
Programs for Gifted and Talented
Madison County Schools
59 North Main Street
London, Ohio 43140
(614) 852-2174

Mrs. Jane Navarre, Coordinator
Programs for Gifted and Talented
Hardin County Schools
Court House
Kenton, Ohio 43326
(419) 673-5295

Ms. Janet Hartman, Coordinator
Programs for Gifted and Talented
Lucas County Schools
3350 Collingwood
Toledo, Ohio 44610
(419) 241-3248

Mrs. Rita Price, Coordinator
Programs for Gifted and Talented
Erie County Schools
1200 Sycamore Lane
Sandusky, Ohio 44870
(419) 626-9440

Ms. Marguerite Ray, Coordinator
Programs for Gifted and Talented
Oregon City Schools
5721 Seaman Road
Oregon, Ohio 43616
(419) 693-0661

Mr. Paris Roland, Coordinator
Programs for Gifted and Talented
Southeastern Regional Education
Service Agency
52 University Terrace
Athens, Ohio 45701
(614) 593-3511

Ms. Patricia Schultz, Supervisor
Programs for Gifted and Talented
Lawrence County Schools
608 Cemetary Lane
Coal Grove, Ohio 45638
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Miss Jean Thom, Supervisor
Major Work Program
Cleveland City Schools
1380 East Sixth Street
Cleveland, Ohio 44114
(216) 696-2929

COORDINATORS ON SPECIAL ASSIGNMENT:

John Durden
Akron City Schools
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Akron, Ohio 44308
(216) 434-1667

Roy Matthews
Cincinnati City Schools
230 E. 9th Street
Cincinnati, Ohio 45202 (513) 369-4000

STATE

Mr. George Fichter
Educational Consultant
Programs for Gifted and Talented
Ohio Department of Education
Division of Special Education
933 High Street
Worthington, Ohio 43085
(614) 466-8854

Mr. Colin Yacks, Director
Special Education
Hamilton County Schools
11083 Hamilton Avenue
Cincinnati, Ohio 45231
(513) 742-2200

NATIONAL CONTACTS

Dr. Dorothy Sisk, Director
Education of the Gifted and Talented
Office of Education
7th and D Streets, S.W.
Washington, D. C. 20202
(202) 245-2482

Dr. Irv Sato, Project Director
National/State Leadership Training
Institute on Gifted/Talented
316 West Second Street, Suite 708
Los Angeles, California 90012
(213) 489-7470

APPENDIX G

College Course Descriptions for Gifted and Talented Education

College of Education
Faculty for Exceptional Children

General Special Education
Emphasis on Gifted and Talented

Schedule of Regularly Offered Courses

Ed. Excep. 675:	Teaching the Gifted - Issues and Problems
Credit:	Undergraduate & Graduate, 3 hours
Quarters Offered:	Fall, 7:00 - 9:30 Thursdays
Prerequisites:	Ed. Excep. 651 or permission of instructor
Ed. Excep. 805:	Teaching the Gifted - Instructional and Curricular Adaptations
Credit:	Graduate, 4 hours
Quarters Offered:	Spring, 7:00 - 9:30 Thursdays
Prerequisites:	Ed. Excep. 675 or equivalent and permission
Ed. Excep. 925.66:	Seminar on Identification and Evaluation
Credit:	Graduate, 3 hours
Quarters Offered:	Winter, 4:00 - 6:30 Mondays
Prerequisites:	Permission of instructor
Ed. Excep. 884.66:	Field Experience
Credit:	Graduate, 3-15 hours
Quarters Offered:	Fall, Winter, Spring by arrangement
Prerequisites:	Permission of instructor
Ed. Excep. 693.66:	Independent Study
Credit:	Undergraduate & Graduate, 3 hours
Quarters Offered:	Every Quarter
Prerequisites:	Permission of instructor
Ed. Excep. 692.66:	Workshop
Credit:	Undergraduate & Graduate, 1-6 hours
Quarters Offered:	Summer and as needed
Prerequisites:	Permission of instructor
Ed. Excep. 694.66	Group Studies
Credit:	Undergraduate & Graduate, 3 hours
Quarters Offered:	As needed
Prerequisites:	Permission of instructor

FACULTY FOR EXCEPTIONAL CHILDREN
COLLEGE OF EDUCATION
THE OHIO STATE UNIVERSITY

MASTERS DEGREE
GENERAL SPECIAL EDUCATION AREA
EMPHASIS ON EDUCATION
OF THE GIFTED

Name: Phone:

Address: Date Filed:

Advisor:

---

1. SPECIALIZED AREA

A. CORE

COURSE NUMBER	TITLE	CREDIT HOURS
Ed. Excep. 651	Introduction to Exceptional Children	3
Ed. Excep. 773	Directive Teaching of Exceptional Children	3

B. AREA

Ed. Excep. 675	Teaching the Gifted - Issues and Problems	3
Ed. Excep. 805	Teaching the Gifted - Instructional and Curricular Adaptations	4
Ed. Excep. 925.66	Seminar	3
Ed. Excep. 884.66	Planned Field Experience	6
	or	
Ed. Excep. 885.66	Supervised Teaching in Special Education	6
Psychology 680.02	The Intellectually Gifted	3
Ed. Intec. 730	Technological Activities for Teachers of Exceptional Children	4
		29

KENT STATE UNIVERSITY
KENT OHIO 44242

DEPARTMENT OF
SPECIAL EDUCATION
(216) 672-2477

INFORMATION
GIFTED EDUCATION PROGRAMS

This Department offers programs in gifted education leading to the following degrees; B.S., M.Ed. or M.A., Ed.S. (Education Specialist--6th year), and the Ph.D. An appropriate balance among academic work, field experience, and research is a major consideration of the gifted education programs at Kent State. In the academic area the basic concerns focus on the nature and needs of the gifted individual(the psychological, sociological, and educational needs and capabilities of the person), the instructional processes appropriate to gifted/talented (G/T) students, assessment and placement of G/T children, and general evaluation criteria to insure that the educational services being offered are appropriate to individual and programmatic needs.

It is also recommended that students in gifted degree programs take work in appropriate cognate areas such as psychology and sociology. Additional education work in curriculum/instructional design, supervision, administration and counseling is suggested in relation to the gifted major's experience and orientation. Majors in gifted education have highly individualized programs developed with their major advisor. The goal is to have gifted education specialists be both competent and humanistic in order to strengthen their interaction with, and impact on, G/T children and youth.

Research and field work opportunities are abundant with the array of varied types of gifted program offerings being conducted by school systems in northeastern Ohio. It is essential that future teachers/coordinators of G/T programs have direct contact with students in various settings in order to observe, assist, and instruct G/T students with multi-faceted abilities.

We have asked that application forms and a catalog be sent to you. After reading this information if you have specific questions about any phase of our program, please write us.

Degree programs in gifted education have been offered at Kent State since 1956. Then, as now, the educational and professional development of the indvidual majoring in gifted education is our major concern.
Good luck in your endeavors!

Sincerely,

Wilber D. Simmons, Ed.D.
Associate Professor
Coordinator, Gifted Education Programs

WDS:s
10-78

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KENT STATE UNIVERSITY
KENT, OHIO 44240

DEPARTMENT OF
SPECIAL EDUCATION
(216) 672-2477

GIFTED COURSEWORK

The basic list of courses is shown in the right column. From this we establish other areas of concentration, such as instruction, curriculum, or research. This program is in the process of revision to provide a better balance among the development areas of academics, personality, and social ability as they relate to training, research, and field practicum.

If you have further questions, please contact me. Good luck in your endeavors.

Gifted

53529 NATURE AND NEEDS OF GIFTED CHILDREN (3) Simmons
Study of personal characteristics, abilities and potentialities of gifted through review of related research. Evaluation of research findings and implications for future adjustment. Prerequisite: None.

53530 INSTRUCTIONAL PROCESSES FOR GIFTED CHILDREN (3) Simmons
Discovery and guidance of mentally superior children. Provision for school attention and accommodations. Case studies of gifted children. Prerequisite: SPEC 43529/53529 or Psych. 40120/50120 or permission.

53592 FIELD EXPERIENCE: GIFTED (2-10) Staff
Recreational, therapeutic and academic experience with Gifted children in a camp, school, or residential facility. Seminars, participation and evaluation under supervision of experienced personnel. Prerequisites: SPEC 43950/53950 or Psych. 40670/50670, or permission and senior standing.

53593 WORKSHOP: GIFTED (3 or 5) Staff
Prerequisite: Permission.

63591/73591 SEMINAR: RESEARCH PROBLEMS IN GIFTED (2-5) Staff

63596 RESEARCH IN GIFTED (2-15) Staff

73592 ADVANCED PRACTICUM OR INTERNSHIP IN GIFTED (2-10) Staff

73596 INDIVIDUAL INVESTIGATION IN GIFTED (2-5) Staff

83591 SEMINAR IN GIFTED (2-5) Staff

83598 RESEARCH IN GIFTED (2-15) Staff

Sincerely,

Wilber D. Simmons, Ed.D.
Associate Professor
Coordinator, Gifted Programs

Wright State University

Education 722 Gifted Children and Youth

An overview of the characteristics of gifted children and youth; the historical and current aspects of education of the gifted and the vocational concerns of the gifted.

Education 723 Teaching the Gifted

Direct experience in the teaching of gifted children and youth. Subject content will vary according to specific subtitles. Inservice offering is Education 722 and 723.

Xavier University

Education 422 Educating the Exceptional Child

Current educational trends for gifted, mentally retarded, emotionally disturbed, speech-impaired, hearing impaired, visually impaired, physically handicapped, and neurologically impaired child.

Education 423 Workshop: Teaching the Gifted

Skill development, appropriate teaching strategies, and examination of personal/professional attitudes, practices, and goals regarding education of the gifted. Inservice offering is Education 422 and 423.

Capital University

Education 301 Teaching the Exceptional Child

Methodology applicable to instruction in the field of exceptionality in the child with emphasis on: learning-disabled youth, educable mentally retarded, visual impairment, hearing impairment, and severe behavioral handicaps, language handicaps, and gifted.

University of Toledo

Education 405 Psychology and Education of the Gifted

An investigation into the growth and development of the gifted and talented child.

APPENDIX H

Main and Branch Campus Locations
for
Ohio Universities

APPENDIX H

Main and Branch Campus Locations for Ohio Universities

5.0 Kent State University
- 5.1 Ashtabula Campus
- 5.2a Columbiana County Campus at Salem
- 5.2b Columbiana County Campus at East Liverpool
- 5.3 Geauga County Campus
- 5.4 Stark County Campus
- 5.5 Trumbull County Campus
- 5.6 Tuscarawas County Campus

1.0 Capital University

2.0 Xavier University

7.0 The Ohio State University
- 7.1 Lima Campus
- 7.2 Mansfield Campus
- 7.3 Marion Campus
- 7.4 Newark Campus

9.0 University of Toledo

10.0 Wright State University
- 10.1 Western Ohio Campus
- 10.2 West Central State General and Technical College

APPENDIX I

Selected Poems
by
Gifted and Talented Children

APPENDIX I

Creativity is often expressed in the fluency required to write poetry. The poems shown below are by eight- and nine-year old children, each one a very special person.

Sledding is fun,
Sledding is nice,
But before you know
You're in a bed of ice.
Betsy Hubbard

Snow is animals
Building a snowman
and making friends.
Daren VanWinkle

Snow, snow, beautiful snow,
As I go walking in the snow,
The wind will blow.
Why?
I don't know.
Snow, snow, beautiful snow.
Nancy Johnson

Snow is pretty,
Snow is nice,
Snowflakes are never,
The same shape twice.
Les Hamilton

I like snow,
With its crisp crunch
But I know
Something digs for its
lunch under the snow.
Robin Pritchard

Snow, snow, beautiful snow.
It follows me everywhere I go.
Sherry Rice

Snow, snow
Go away.
Come back--
On a sunny day!
Nancy Tanner

The snow is like a glob of icing.
Chris Dean

Don't you wish
That snow would stay
And would not melt
Until you say?
Bethany Ross

Snow, snow,
Bluster and blow.
There go my mittens,
Oh no, oh no.
How long will it snow,
Snow, snow?
Chrissy Shibley

Source: "A Winter Wonderland of Poetry," written by the gifted children in Mrs. Linda Witwer's fourth grade class at Clinton Elementary School in Columbus, Ohio.

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BIBLIOGRAPHY

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